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JUNIOR COLLEGE JOURNAL

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IN THIS ISSUE—

*Addresses and Proceedings
of the
Fourteenth Annual Meeting
of the
American Association
of
Junior Colleges
Held at Columbus, Ohio
February 23, 24, 1934*

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(Complete Table of Contents on First Text Page)

THE JUNIOR COLLEGE JOURNAL

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THE JUNIOR COLLEGE JOURNAL

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(NOTE: This issue, the last of the current volume, is devoted exclusively to the addresses and proceedings of the Columbus convention. The regular departments, editorial, news, discussions, book reviews, and bibliography will be found in the next issue, which will be published in October 1934.)

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MEETINGS OF THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES

Date	Place	President	Secretary
*1920 June 30, July 1	St. Louis, Mo.	James M. Wood	Martha McKenzie Reid
1921 February 16, 17	Chicago, Ill.	David MacKenzie†	Martha McKenzie Reid
1922 March 24, 25	Memphis, Tenn.	Geo. F. Winfield	Martha McKenzie Reid
1923 February 27, 28	Cleveland, Ohio	James M. Wood	Doak S. Campbell
1924 February 26, 27	Chicago, Ill.	James M. Wood	Doak S. Campbell
1925 February 20, 21	Cincinnati, Ohio	Louis E. Plummer	Doak S. Campbell
1926 March 17, 18	Chicago, Ill.	H. G. Noffsinger	Doak S. Campbell
1926 December 3, 4	Jackson, Miss.	L. W. Smith	Doak S. Campbell
1928 March 12, 13	Chicago, Ill.	Edgar D. Lee	Doak S. Campbell
1928 December 3, 5	Fort Worth, Tex.	J. Thomas Davis	Doak S. Campbell
1929 November 19, 20	Atlantic City, N.J.	John W. Barton	Doak S. Campbell
1930 November 18, 19	Berkeley, Calif.	Jeremiah B. Lillard	Doak S. Campbell
1932 February 19, 20	Richmond, Va.	Richard G. Cox	Doak S. Campbell
1933 February 24, 25	Kansas City, Mo.	Arthur Andrews	Doak S. Campbell
1934 February 23, 24	Columbus, Ohio	A. M. Hitch	Doak S. Campbell

* Preliminary conference, called by the United States Bureau of Education.

† Deceased.

THE JUNIOR COLLEGE JOURNAL

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Vol. IV

MAY 1934

No. 8

Program of Fourteenth Annual Meeting American Association of Junior Colleges

Deshler-Wallick Hotel, Columbus, Ohio

FRIDAY MORNING, FEBRUARY 23

Theme: Studying Pupils and Applying Remedies

- 9:00 Registration of Delegates and Visitors
- 9:30 Call to Order. Introductions
- 9:45 Address of Welcome. Hon. B. O. Skinner
Director of Education for the State of Ohio
- 10:00 "Evaluating the Achievement of College Students"
Prof. Ralph W. Tyler
Bureau of Educational Research, Ohio State University
- 10:30 "Testing and Remedial Teaching to Remove Deficiencies in Educational Fundamentals"
- a) "By Means of Remedial Classes" M. E. Troyer
Department of Psychology, Ohio State University
- b) "By Means of Self-Directive Practice Exercises"
Fred P. Frutchey
Bureau of Educational Research, Ohio State University
- 11:30 Discussion. Led by H. B. Wyman
Dean, Phoenix Junior College
- 12:00 Adjournment
- 12:30-3:30 Group Luncheons

Private Junior Colleges

President Richard G. Cox, Gulf Park College, presiding.

Speakers to be arranged. Discussion expected.

Code of Ethics for Private Junior Colleges

Costs and Returns on Advertising and Solicitation. Maintenance of Special Plants, such as Laundry, Refrigeration

Student Regulations and Self-Government, as Smoking, Dancing, Chaperonage. Emma I. Sisson
Ward-Belmont School

Curricula for Private Junior Colleges

Federal Aid for Schools. E. E. Cortright
President, Junior College of Connecticut

Public Junior Colleges

Dean J. F. Wellemeyer, Kansas City (Kansas) Junior College, pre-
siding

"The Closing of Crane Junior College, Chicago"

J. Leonard Hancock

"Federal Aid for Higher Education"

Discussion led by Arthur I. Andrews

Grand Rapids Junior College

"Possible Adjustments of the Small Junior College to Help in
Meeting the Present Need".....Dean E. Q. Brothers

Little Rock (Arkansas) Junior College

Reports and General Discussion

4:00 Tour of Columbus, including Ohio State University

FRIDAY EVENING

6:30 Annual Dinner

Address.....George W. Rightmire*
President, Ohio State University

SATURDAY MORNING, FEBRUARY 24

7:30 Phi Delta Kappa Breakfast. Y.M.C.A.....Dean H. B. Wyman
Phoenix Junior College, presiding

"The Junior College and the Future Reorganization of Education"
Dr. Arthur J. Klein

Department of Education, Ohio State University

Main Session—Theme: *The Four-Year Colleges and the
Junior College Program*

9:15 "Reorganization of the Lower Division of Universities"
University of Chicago.....Dean C. S. Boucher
University of Minnesota.....Dean Malcolm S. MacLean
University of Indiana.....Prof. Edgar L. Yeager

11:00 Discussion.....Nicholas Ricciardi
President, San Bernadino Valley Union Junior College

SATURDAY AFTERNOON

Theme: Miscellaneous Discussions and Business Sessions

2:00 "Business Administration Courses".....Dr. W. H. Spencer
Director of School of Business, University of Chicago

2:30 "Orienting the Freshmen".....Dr. J. C. Miller
Dean, Christian College, Columbia, Missouri

3:00 "The Junior College Journal, et cetera".....Dr. W. C. Eells
Office of Education, Editor

3:20 Report of Research Committee.....Dr. W. W. Carpenter
Chairman, University of Missouri

3:40 Report of Other Committees

4:00 Adjournment

* The banquet address by President Rightmire was received too late to be included in this number. It will appear in the October issue of the *Journal*.

Evaluating Achievement of College Students

RALPH W. TYLER*

The common conception of the phrase "testing the achievement of college students" is the use of certain so-called "objective tests." This is an unfortunate connotation. Objectivity in the sense of eliminating personal biases in the evaluation of student achievement is desirable and important but objectivity when limited to particular devices used with paper and pencil tests is by no means the most important problem in testing the accomplishments of students. What we are really concerned about is satisfactory measurements which show us how well students are progressing in their school work.

What constitutes progress in school work? It is certainly true that every change which takes place in a student during the time he is in college cannot be considered progress. During the time he is in college the student may grow taller, he may grow fatter, he may acquire a new slang vocabulary, but we do not consider these as evidences of the progress of students in their school work. Each subject which is taught is offered with the expectation that students who take this subject will undergo certain desired changes as the result of the course. In a clothing course, for example, it is expected that students will learn to select clothes more wisely for particular occasions, that

they will become somewhat skillful in certain types of clothing construction, that they will learn to select textiles more wisely for use in constructing clothing for particular purposes, that they will learn to design appropriate clothing for their own needs. These changes which we expect to take place in the students are the objectives of the subject. It is apparent that a satisfactory procedure for measurement in a clothing course is one which shows us the degree to which students are reaching these objectives, that is, the degree to which they have learned to select clothes more wisely for particular occasions, the degree to which they have become more skillful in clothing construction, the degree to which they have learned to select textiles more wisely, and the degree to which they have learned to design appropriate clothing for their own needs. In similar fashion every subject offered involves certain objectives which we hope students will reach as the result of instruction in this subject. Satisfactory measurements in any subject demand instruments which give us evidence of the degree to which students are reaching the objectives of the subject.

AN ENLARGED CONCEPTION

Considered from this point of view it becomes necessary to enlarge the common conception of educational measurements. Many

* Bureau of Educational Research, Ohio State University, Columbus, Ohio.

people have limited the concept of educational measurements to paper and pencil tests. This is obviously a harmful limitation. Sometimes the best way to get evidence of the desirable changes which have taken place in students is through observation, or by other means. To use only paper and pencil tests seriously restricts the opportunity for determining the progress students are making. We should be concerned with techniques for obtaining evidence of the degree to which students are attaining every one of the important goals of education. In most subjects there are several important objectives which instructors are trying to reach. Hence a satisfactory examination must correspondingly provide evidence of the degree to which students are reaching each of these important objectives. One major defect of typical educational measurements has been the fact that they have given evidence with reference to only a limited number of objectives and have not been indicating adequately the degree to which students are attaining all of the important goals which instructors are trying to reach in a given subject.

The importance of covering all of the significant objectives in a total examination program can best be shown by illustration. In chemistry the objectives instructors are commonly trying to reach include teaching students to acquire a fund of important facts and principles, to understand the technical terms commonly appearing in chemical publications, to be able to apply important chemical principles to appropriate situations, to express chemical reactions by means of equations involving chemical sym-

bols and formulae, and to be skillful in certain laboratory techniques. Any adequate examination program for chemistry will provide means for discovering how far each of these objectives is being attained. Obviously evidence of all of these attainments cannot be had from a single examination but an inclusive measurement program will cover all of the important objectives. Some of these attainments can be determined by means of paper and pencil tests with which everyone is more or less familiar. Others would need to be tested by different devices. To discover how skillful the students have become in the essential laboratory techniques it is probably necessary to set the students at work on certain laboratory problems and to evaluate their skill by means of observation and by checking the outcome of the laboratory exercises.

The importance of a total measurement program which provides evidence of the student's attainments in all the aspects of the course is not always recognized. When we compare the tests and examinations in common use with the objectives of the courses it is evident at once that these tests do not show us how well the students are attaining all of these objectives. In many subjects the typical tests and examinations give us evidence only of the progress students are making in acquiring facts and in understanding the meaning of technical terms in the field. Rarely do we find students tested on such objectives as their ability to apply the principles of a subject to new situations, their ability to use scientific method, their skill in making appropriate purchases, their skill in

laboratory work. To this criticism of the inadequacy of typical tests the answer is sometimes made that the acquisition of information is basic to all other objectives. It is claimed that one cannot think without facts, hence the test which reveals the degree to which students have acquired important facts indirectly constitutes a test of all of the objectives of instruction. This claim, however, is not justified. In the botany and zoölogy classes at Ohio State University comparisons have been made of the records of students' grades on tests which show the degree to which they have acquired important facts with records of students' grades on tests which indicate how well they are able to apply principles to new situations. The results are by no means identical. It is found that many students who have acquired a large number of facts are unable to apply these facts to new situations. Similarly, in home economics, many students have acquired important facts about textiles and about processes of clothing construction yet are unable to apply these facts in selecting textiles and in constructing clothing. In English, many students have been found who can write effective written compositions but who cannot use oral English effectively. We do not have a complete picture of the progress students are making when we depend only upon tests of a limited number of objectives.

These subjects are but illustrations of the situation prevailing in every field. Because of the importance of having an examination program which gives evidence of the degree to which students are reaching each of the significant objectives

of the subject, an essential first step in planning a measurement program is to formulate in a clear and understandable fashion the important objectives which the instructors are trying to reach. This formulation then becomes a comprehensive plan against which the various tests are checked to be sure that the total measurement program includes devices for determining the degree to which students are attaining each of these objectives.

OBJECTIVES IN ZOÖLOGY

The fact that a given course usually includes a variety of objectives is illustrated by the objectives which have been formulated by our Department of Zoölogy for the elementary course. These are to teach students: (1) to recall important zoölogical facts; (2) to remember general zoölogical principles; (3) to recognize the meaning of common technical terms found in zoölogical publications; (4) to formulate reasonable generalizations from experimental data; (5) to plan satisfactory experiments to test promising hypotheses in zoölogy; (6) to apply significant zoölogical principles to situations new to the student; (7) skill in the laboratory techniques of dissection and use of the microscope; (8) skill in reporting the results of experiments in effective English; (9) to be familiar with dependable sources of information on zoölogical problems.

Obviously this variety of objectives requires a more comprehensive program of measurement than is provided by most examinations.

The formulation of objectives is not an easy task. It requires thoughtful consideration on the part of instructors of the subject and a

review of the proposed objectives by other departments and by administrators to be sure that the particular course in question contributes its utmost to the purposes of the college and that it accomplishes the purposes for which the particular course was provided in the curriculum. Furthermore, many statements of objectives tend to be so vague and nebulous that although they may look well they prove to be glittering generalities whose meaning is not clear to the instructors concerned. Hence, after formulating the objectives the next step is to define each objective in terms of the student behavior expected to result from instruction. Behavior is used here in the broad sense to mean any sort of appropriate reactions of students, mental, physical, emotional, and the like. This definition of objectives in terms of behavior helps to make clear how one can tell when the objective is being attained, since those students who are reaching the objective will be characterized by the behavior specified in this analysis. For example, in the case of the objectives for the elementary zoölogy course, the second one was to teach students to remember general zoölogical principles. This objective was analyzed by defining the behavior expected of students who are reaching the objectives in the following terms: To remember and state these principles without having to look them up at the time, and to recognize misconceptions which are commonly mistaken for zoölogical principles. The analysis of this objective also required a formulation of the list of general zoölogical principles which students are expected to remember.

The fourth objective was defined as the ability to formulate in his own words as complete a generalization as is justified by the data presented, when the student is given the results of a zoölogical experiment. As a further step in the analysis it was necessary to collect typical experiments which were new to the students yet which they should be able to interpret in this way. The experiments should be new to the students so that they cannot depend upon their memory of the interpretations which have been made by others.

In analyzing the fifth objective it was defined as the ability to determine what facts would need to be established in order to substantiate a given hypothesis and the ability to plan an experiment to establish or disprove these facts. A list was then made of hypotheses new to the student and yet for which they should be able to plan satisfactory experiments, without depending upon their memory of the experiments proposed by others.

The sixth objective was defined as the ability to predict the outcome of a situation involving one or more of the zoölogical principles included in the course and the ability to use these principles in explaining why this outcome could be expected. The analysis also required the collection of situations new to the students which would give them a chance to apply the important zoölogical principles taught in the course and previously formulated in connection with the second objective.

For the eighth objective, the ability to report the results of experiments in effective English, specifications were drawn up to guide the

instructors in their evaluation of the English used by the students in writing up their experiments. The ninth objective was defined as the ability to state the sources which were most likely to give dependable information on specific kinds of zoölogical problems. A list was made of the sources of information with which elementary students should be familiar and of the types of zoölogical problems in connection with which they would be expected to consult the sources of information.

When these objectives have been defined in terms of behavior their meaning has been greatly clarified. It is then possible to take the third step, which is to determine possible situations in which we may expect students to reveal the presence or absence of the objectives. These are "test situations" in the broad sense. Thus, in a clothing course, girls will have a chance to show the degree to which they are able to select clothing wisely for particular occasions and for particular types of girls when selected types of young women appear before the class wearing different costumes and the members of the class are asked to select the best costumes which are appropriate for specified occasions. This is a test situation for one of the objectives in a clothing course. Similarly, students in botany have a chance to show their ability to apply botanical principles to situations new to the students when situations are presented to them or described to them which involve botanical principles and the students are asked to predict what is likely to take place and why, using appropriate botanical principles in their explanations. For each

objective, practicable test situations are selected in this third step.

At this point the claim is sometimes made that it is impossible to evaluate such a wide variety of student behavior objectively. It is said that we are no better off than though we depended upon wholly subjective judgments of the quality of an institution or of its graduates. We have found, however, that when each test situation is chosen specifically to give evidence of a particular objective and when instructors evaluate the student's reaction in this test situation with reference to the particular objective in question that the independent evaluations of many instructors do not fluctuate widely. Such evidence may be called objective measurement because it conforms to certain standards, viz., (1) it is based directly upon behavior or upon the observed results of behavior, (2) these observations or results are recorded, and (3) various independent evaluations of the behavior do not fluctuate widely. It is possible to place a great deal of confidence in measurements which are made to cover a wide variety of objectives and which are developed in this way.

RESULTING VALUES

There are several values which result from a measurement program that gives evidence of the degree to which students are attaining each objective separately. One important use is to determine changes in emphasis in a particular course so that the teaching will be more effective. For example, in several clothing classes we found that students were not making much progress in their ability to

select clothing wisely, although they showed considerable progress in most of the other objectives. When this result was found in class after class, the instructors decided to place greater emphasis upon the selection of clothing and to provide more opportunities for supervised buying. After the course had been reorganized in this way we then found that students were making greater progress in their ability to select wisely. As another illustration of this value, the measurement results in the elementary course in zoölogy showed that students were not gaining much facility in interpreting experiments, although they were making considerable progress on other objectives. On the basis of this fact the instructors in elementary zoölogy changed the course in such a way as to provide greater opportunity for interpreting experimental data. Later measurements showed that this change resulted in a greater progress on the part of the students with reference to this objective. These two cases are but illustrations of the fact that measurements developed to cover all of the important objectives of the course provide an opportunity for improving the effectiveness of a course because the measurements show where the weak spots are found to exist.

Another value of such a program is in the opportunity it gives for helping individual students at the particular points of difficulty for them. Thus, in the elementary course in botany a student was found whose test results showed that he remembered most of the important facts in the botany course but he was unable to apply these facts and principles to new situ-

ations. The instructor was able to provide the student with materials giving him additional chance to apply principles to new situations. Another student was found who was able to apply principles to new situations but who did not remember many of the important facts in the course. The instructor could help this student by advising him to study the materials of the course in such a way as to increase his recall of important facts. A third student's record showed that he did not learn to use the microscope effectively and was thus prevented from getting first-hand contact with the internal structures of the plant. This student was sent to the laboratory for assistance in learning to use the microscope. These are but examples of the value of comprehensive educational measurements in providing an opportunity for diagnosing students' difficulties in learning and in this way increasing markedly the effectiveness of instruction.

CURRICULUM EVALUATION

Another significant use for such educational measurements is in determining the effectiveness of various curricular prescriptions. Many courses are put into a college curriculum because of their service function, that is, because they are expected to provide certain things which are prerequisites to other courses. For example, a course in mathematics may be set up as a service course or prerequisite to courses in science; a course in zoölogy may be prerequisite to courses in animal husbandry; a course in bacteriology may be prerequisite to courses in physiology, in dairy technology, or home economics. Many

of these service courses are thought to fail of the desired ends; that is to say, they are thought not to provide the necessary prerequisites. By formulating the objectives for these service courses, and by providing measurements which really give evidence of the degree to which these objectives are being reached, we have a means of determining how effective these service courses really are and at what points, if any, they need to be improved.

CLASS SIZE STUDIES

Perhaps the most important use of this program of measurements, from the point of view of the administrator, is the opportunity it gives for determining the value of certain teaching procedures and certain administrative policies. Conclusions drawn from measurements which do not cover all of the important objectives of instruction are inadequate. For example, a great deal of experimentation has been conducted in the past few years to determine the relative effectiveness of instruction in large classes and in small classes. In most cases, the effectiveness of large and small classes has been determined by tests which indicate only the amount of information which students have acquired in these classes. In our Zoölogy Department we are conducting such an experiment, but by measuring each of the important objectives separately we find that the effectiveness of large and small classes varies with the different objectives. In the acquisition of verbal information the large classes have been as effective as the small classes. On the other hand, in the understanding of the actual structures and functions of animals the small

classes have been more effective than the large classes. In general, as the experiment continues, we are discovering that the differences in effectiveness of large classes and of small classes vary greatly with the nature of the objectives we are testing. In similar fashion we have been concerned with the value of individual conferences between student and instructor. It has been suggested that the instructional effectiveness of a large institution may be improved by providing for more of these individual conferences to overcome the possible lack of personal contacts which might develop in a large college. We have compared the progress of students who have had opportunity for these individual conferences with the progress of students who have not had this opportunity. Again we have found that the value of individual conferences varies somewhat with the nature of the objective. Individual conferences have been especially valuable in the zoölogy courses in teaching students to develop the ability to use scientific method and they have contributed less to the students' acquisition of information.

Probably these illustrations are sufficient to suggest the values of including all of the important objectives in a comprehensive program of educational measurement, and of getting evidence of the development of each objective separately. However, the development of such a program requires a fertile seed bed in which to grow. The progress which has been made at Ohio State University is due to the interest of both faculty and administration. It is especially the function of the administrator to

provide the opportunity for such a program, to shape the time schedules of those concerned so that the time will be available for the development of measurements, and continually to encourage and to educate the faculty with regard to such a comprehensive program. Ultimately the faculty depends upon the administration for educational leadership. This is a responsibility which the administration cannot ignore.

On the part of the faculty such a measurement program requires time and effort both from instruc-

tors and from test technicians who may act as advisors. As our work proceeds I have become more and more convinced that this time and effort are wise investments. Our measurements show that our instructional effectiveness is increasing because of the opportunity for discovering the points of weakness, for giving more helpful suggestions to individual students, for determining points at which prerequisite service courses may be strengthened, and for discovering the more valuable teaching and administrative procedures.

Removal of Deficiencies by Remedial Classes

M. E. TROYER*

NATURE OF THE PROBLEM

Researches on the incidence of failures and withdrawals from our colleges and universities have led to some interesting problems in the field of remedial instruction. A study made by Drs. Edgerton and Toops¹ shows that of the 1,958 freshmen enrolling at Ohio State University in 1923, only 68.6 per cent returned to complete work in the autumn quarter of 1924; 49.9 per cent returned to complete work in the autumn quarter of 1925; 40.3 per cent returned to complete work in the autumn of 1926; and only 35 per cent of the original entrants completed work in the spring quarter of 1927, the regular time for graduation.

While a fairly large percentage of withdrawals is due to lack of ability it is not known to what extent this is true. An examination of the intelligence test scores and high-school records of those students placed on probation shows a considerable number to be very capable. The median intelligence test score, in terms of percentile, for forty-three probation students during the spring quarter of 1933 was 53. The median score for the remedial group, largely made up of probation students, for the present quarter is

46. Out of this group of forty there are five who had an intelligence test rating above the eightieth percentile and only three who scored below the twentieth percentile. It is also significant that several in each group have been salutatorians and valedictorians in their high-school classes. The perusal of such data impresses upon one the need for special attention to remedial work.

The remedial course at Ohio State University is a required course in the College of Education for students who are on probation because of a low point-hour ratio. The course is optional for other students who have low marks or probation students from other colleges. These students are admitted to the course through the consent of the Junior Dean of their college. The course is a three-hour course meeting five days a week as a laboratory course.

There are, in general, two types of fundamental preparation for efficient learning. These two types can be found at every level of education whether elementary, high school, or college. The first type of educational fundamental is that which has as its core the student's health and emotional makeup, his use of time, his specific habits of study, ability to concentrate, the extent to which he can and does outline and otherwise organize his work, his speed of reading and the extent to which he comprehends what he reads and hears.

The second type is that which

* Department of Psychology, Ohio State University, Columbus, Ohio

¹ H. A. Edgerton and H. A. Toops, *Academic Progress* (Ohio State University Press, 1929).

serves as a background of knowledge for new work. It is what one ordinarily thinks of as those skills in specific subjects which are assumed by authors and teachers to have been learned in previous school work. Remedial teaching in this type of educational fundamental has been carried on for some time. There are tutorial courses in English and mathematics, for example. While many of these tutorial or remedial courses meet certain needs of students, they can be successful only in so far as the fundamental preparation of the first type will allow them to be successful. For that reason, this paper will concern itself primarily with tests and remedial teaching to remove deficiencies in educational fundamentals of the first type.

HEALTH

Health is of primary importance in the learning situation. It is therefore essential that remedial teachers know something about the health of each student. A health questionnaire, developed by Dr. S. L. Pressey, is used in the remedial classes at Ohio State University. It serves two purposes: first, it gives the teacher valuable information about the health habits of the students; and, second, it gives the students an opportunity to see the interrelationship of health habits and efficient study.

The students are given a health questionnaire as they enter the remedial class. The questionnaires are so constructed that favorable habits and conditions are easily differentiated from the unfavorable ones. The total health score is only significant in determining the general health level of the student. A

student may have a general health picture that is low without showing any obviously serious defects. The greatest value, however, will probably be got from a detailed study of the questionnaire. Those students who are unusually low in general health, or have serious specific defects such as chronic appendicitis, continuous colds, evidence of goiter or heart weakness, undue nervousness, sleepless nights, or irregular elimination are sent to the student health clinic for thorough physical examinations. The reports from the clinic on the health of these students are used in making recommendations as to further work in school.

The health questionnaire frequently reveals habits that are less serious, but still are not conducive to learning. Such conditions as irregular sleep, unbalanced diet, irregular meals, and various types of intemperance may interfere greatly with efficient learning and general emotional stability. In many cases it is practically impossible to tell how seriously the student is deficient in other educational fundamentals until the health status is known and at least partially adjusted. It must not be forgotten, however, that some health cases (poor sleeping and nervous conditions) grow out of inadequate study habits, and subsequent failure. This leads us to our next topic for discussion, that of study habits.

HABITS OF STUDY

As a first step in the determination of the nature of students' study habits, they are asked to fill out time schedules for a typical week of the previous quarter. The blank calls for an account of how the student spent all of his time between

the hours of seven in the morning and eleven at night. An analysis of these schedules for the six days, excluding Sunday, shows the following ranges of time spent in different activities: class and laboratory, 10-30 hours; sleep, 30-65 hours; study, 5-48 hours; recreation (physical and social), 3-30 hours; eating, 6-15 hours; and work, 0-35 hours per week.

A comparison of the foregoing ranges with what might be considered a well-balanced time budget for a six-day week is quite revealing. A student may spend twenty hours per week in class and laboratory, twelve hours per week eating, forty-eight hours per week sleeping, thirty hours per week studying, eighteen hours per week in physical and social recreation and still have sixteen hours per week for incidentals.

After having read the treatment of the budgeting and scheduling of time by Pressey and Ferguson² and Wrenn³ and after having discussed the topic thoroughly in class the students are asked to make out a time schedule for the current quarter. The chief problem of some students in following a study schedule is that of following any schedule. For other students the problem is one of staying within the time limit for study while still others find it difficult to stay within the time limit set for recreation. The remedial teacher who sells the time budget to the students must be a good salesman and follow-up agent combined.

The students are also asked to

fill out a study questionnaire in order to determine more specifically the nature of their study procedure. This questionnaire has also been prepared by Dr. Pressey and is so constructed that it is possible to get a general score for study habits and also to analyze the answers for specific weaknesses in study procedure. Does the student study in the library, at home, in a rooming house, or in a fraternity? Does he room alone? Does he have a clear table when he studies? Does he outline his readings and lectures? Does he have a regular notebook or does he keep notes on scraps of paper? Does he recite to himself as he studies? These are some of the questions asked. Of course it must always be remembered that students may answer such questionnaires the way they think they ought to be answered rather than the way they have practiced them. All of the questionnaires and tests are supplemented by private interviews.

EXERCISES IN OUTLINING

One of the most valuable of the remedial exercises is that of outlining. The ability of the student to outline is tested at the beginning of the course in several ways. First, a measure of his ability to see the relationships of points is obtained from part of a general reading test. Second, the students are asked to bring in notes which they took on readings and lectures during the previous quarter. Third, specially prepared passages are given to the students for which they are to make outlines. These have been used often enough that the acceptable outlines for them have become fairly well determined.

² Jessie Ferguson and L. C. Pressey, *Students' Guide to Efficient Study* (R. R. Smith Company, New York, 1931).

³ C. Gilbert Wrenn, *Practical Study Aids* (Stanford University Press, 1931).

Practice in outlining starts just as soon as the various tests and questionnaires have been taken. The outlines the students make of class discussions on "The Budgeting or Scheduling of Time," "Learning to Concentrate," "Reading and Comprehension," "Methods of Outlining," and "Reviews and Preparation for Examinations" are carefully checked by the instructors. Throughout about four weeks of the quarter the students spend their time in the remedial class outlining the textbook material of other courses they are taking. Specific methods of outlining and various techniques applicable to specific subjects are developed. Repeated tests are given to determine the development of outlining ability and the scores on these tests together with the quality of outlining the students do in other courses are important factors in the final grade for the course.

One of the most difficult problems in remedial work is that of selling outlining as a study technique to certain students. It is almost impossible to get certain students to realize that the weighing of points, the critical reading necessary to outlining, the restatement of facts and principles in the student's own words and even the act of recording these statements in writing are valuable accessories to a broad and thorough learning situation. Another type of student is the one who outlines things in such detail that his notebook is almost as large as his textbook. These students have not learned to differentiate the more important points from those of lesser importance. Many students are inclined to become discouraged and give up because they cannot

see that they are increasing their ability to outline well. Ability to make good outlines comes through extensive practice. A continual demand for motivation of these students is made on the remedial teacher. It is quite important that the material to be outlined is easy enough at first that the student may be successful in it.

RATE AND COMPREHENSION

The causes of slow reading and poor comprehension are numerous. One may be a slow reader because he pronounces every word to himself, because he has an inadequate vocabulary, because he cannot differentiate main points from details, because of ignorance of foreign words or phrases and abbreviations, because of lack of ability or carelessness in reading graphs, charts, tables, maps and diagrams, or because of a lack of technical knowledge of English grammar.

Observations and photographs of eye movements in reading have shown that superior readers make about three or four fixations of their eyes upon each line, while very slow readers, especially those who pronounce every word to themselves, fixate practically every word in the line. Students who have poor mechanical habits of reading may be rather readily ascertained by observing lip movements, turning of the head while reading, and eye-movements through a mirror. More than 50 per cent of our remedial students could increase their reading speed without lessening their comprehension by changing their mechanical habits. The chief cause of slow reading with this group probably can be traced back to too

much oral reading in the elementary school.

It is not an easy task to change one's speed of reading. The average college student has been practicing his present speed of reading for about ten to sixteen years. His pace is a well fixed habit. When one tries to change a long-established habit of reading he will, at first, lose in comprehension because he cannot attend both his speed of reading and the content of what he is reading at the same time.

Assuming that other factors of fundamental preparation for reading are adequate (vocabulary and ability to weigh importance of points) there are two methods to go about the problem of increasing the speed of reading. The first is that of starting with a pupil who is reading at the rate of 150 words per minute and gradually increasing his speed of reading by twenty-five words per minute until he is reading at the rate of 300 words per minute. The increase would be slow enough so that no great loss of comprehension would occur any place in the process. The second method is that of starting the student immediately to read at the desired rate, say 300 words per minute. By the second method it is obvious that there will be a great loss of comprehension during the early stages of the practice but only one new speed of reading will be learned. The problem of evaluating the two methods of increasing the speed of reading is one of determining whether it is more efficient to learn six new speeds of reading in going from 150 words to 300 words per minute than it is to learn one new speed which is double that of the original speed. No controlled

experiment has as yet been worked out on this problem but observation in remedial classes points toward an advantage for the latter method.

No matter which of these two methods of increasing the speed of reading is used the practice material at the start should be very easy. While the process of setting up new habits of eye movements, and the getting of meaning by word group rather than individual words is going on, the student should be encouraged to read magazine stories or novels. Using this type of material, they need not worry over poorly comprehended portions of the material read. A large supply of magazines and periodicals are put at the disposal of the students. They quickly estimate the number of words in the article or story and then set a time limit based on a rate of 300 words per minute. As a satisfactory degree of comprehension is reached at that rate the student gradually shifts his practice to more difficult reading. Three hundred words per minute is set up as a norm and not as a standard. At least students are not held down to it.

The problem of diagnosing reading difficulty has been greatly simplified by some new tests developed by Dr. Pressey for the Department of Education of the State of Ohio. They are: "The Reading Speed and Comprehension Test," "The General Reading Test," and "The Special Reading Test."

These tests do not, as yet, have established norms. They have, however, been used to such an extent that some comparisons can be made.

The use of the "General Reading"

and the "Reading Speed and Comprehension" tests may be illustrated in the following manner:

1. Mary has a rapid rate of reading, low comprehension score, average ability to pick out key sentences and to outline, and a low vocabulary score. Her deficiency in comprehension is most likely due to an inadequate vocabulary.
2. John is high in all reading test scores but that of speed. His deficiency is most likely due to poor mechanics of reading.
3. Dick is a very rapid reader and has an excellent vocabulary according to his test scores. His comprehension and key sentence and outlining scores are low. Perhaps Dick never really learned that most paragraphs have key sentences. At least that is a starting place from which to build up the ability to see relationship of points in reading material.

The remedial technique for problems of poor mechanics of reading has been discussed. The ability to differentiate key sentences and organize material is developed through practice in outlining and special reading exercises. There is no panacea for vocabulary ailments but the use of the dictionary will facilitate vocabulary study. Learning the meaning of foreign

words and phrases and abbreviations will aid in the understanding of much required reading in school. Special attention to the comprehension of graphs, maps, tables, and charts on the part of the students in the remedial classroom while studying other courses will go a long way toward removing that deficiency.

EMOTIONAL STABILITY

The subject of emotional stability as an educational fundamental has not been discussed in this paper. It is extremely important. Many emotional problems on the part of remedial students will be solved when problems of health, time budgeting, study habits, and reading deficiencies are solved. The emotional problems that remain when these other problems are solved are of a highly individual character and do not lend themselves to class treatment. Occasionally, tests of emotional stability and personal adjustment are given to certain students. The majority of the technique centers around a series of private conferences. These procedures and results are so different in nature from individual to individual that to treat them in a paper of this length is impossible.

Removal of Deficiencies by Practice Exercises

FRED P. FRUTCHEY*

Especially since the coming of large numbers of students into our colleges, the problem of students poorly trained in educational fundamentals has confronted teachers and administrators. We often hear college teachers say that many students cannot effectively express themselves in writing; they cannot get ideas easily from the printed page; they cannot solve the mathematical problems they encounter in their courses; they do not have command of the fundamentals in history, chemistry, or foreign languages, which are necessary to carry on college work. Several promising methods have been proposed and used to remove the deficiencies in educational fundamentals so that students may satisfactorily proceed with college courses.

One of these is by means of remedial classes. This method has been discussed in the previous paper. A second method is by means of self-directive practice exercises. When used in this sense, the term "practice exercises" has a broader meaning than the term "drill exercises" and covers all types of learning activities in which some practice is involved. Practice exercises need not be limited to developing mechanical or habitual procedures but can be extended to procedures which involve the higher

levels of thinking, such as problem solving in mathematics, the application of principles to new situations, the drawing of inferences, making judgments.

THE PROBLEM ANALYZED

An illustration of the use of self-directive practice exercises may be drawn from the field of dairy technology. The Department of Dairy Technology at Ohio State University has been concerned with the mathematical abilities which its graduates will need. Even though the students had been required to take a course in agricultural mathematics, some students still were unable to solve the problems which dairy technologists encounter in the commercial field. On the assumption that the students needed more training in higher mathematics, the course in agricultural mathematics was no longer required and two courses, one in college algebra and one in trigonometry, were required. After two years of trial, some of the students still did not satisfactorily develop the mathematical abilities needed by commercial dairy technologists. At the invitation of Professor R. B. Stoltz, head of the Department of Dairy Technology, the Bureau of Educational Research has been assisting in a study of this problem.

The first question to arise was, What level of mathematics is used in the vocation of dairy technology?

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Several approaches to this question could have been made but the most fertile one appeared to be an analysis of the instructional materials in the department. This procedure assumed that the instructional materials contain the mathematical problems which are representative of those which commercial dairy technologists encounter. These instructional materials consist of textbooks, reference books, examinations, mimeographed materials, and pamphlets written by college professors of dairy technology who keep in close contact with the commercial field and by commercial dairy technologists of long experience. As the sources were read, each mathematical problem found and its solution were written on a separate sheet of paper. The problems obtained from this analysis could be solved by arithmetic or elementary algebra. The solutions of 90 per cent of the problems pertaining to dairy products involved a knowledge of percentage.

Since an assumption was made at the beginning of the study in regard to the source of the mathematical problems, and since the analysis revealed no problems involving higher mathematics, it appeared desirable to check the assumption. Personal interviews were arranged with managers and workers in commercial dairy plants to obtain their opinions of the level of mathematics required in their vocation and to obtain examples of problems involving higher mathematics. The commercial men agreed that no higher mathematics was necessary for the practical field. None of the examples involved higher mathematics; all of them could be solved by arithmetic and

elementary algebra. This evidence supported the assumption.

We now had available a master list of mathematical problems which men in the practical field of dairy manufacturing are likely to encounter. The objective of instruction in the Department of Dairy Technology is the ability to solve such problems. As a result of any remedial teaching the department expects that its students will be able to solve more types of problems than they could before the teaching began.

THE METHODS USED

Various methods of remedial teaching were considered by which the students' deficiencies in mathematical fundamentals could be removed. The use of practice exercises appeared to be a promising method. A survey of the literature indicated that no exercises were available which were particularly applicable to dairy manufacturing. Many computational and some general problem-solving exercises were found. None of these satisfactorily met the criteria which were set up for practice exercises in mathematics pertaining to dairy technology. The exercises must not only afford practice in quantitative thinking and in the application of mathematical techniques to problem situations but must also provide a solution of the problem and an explanation of how the problem was solved.

Certain criteria were used in writing the practice exercises. They must afford practice in the desired behavior involved in solving the problems which will be encountered in the commercial field. The attempt was made to motivate and

orient the student by pointing out the need for the solution of the problem or by describing a plant situation in which the problem is likely to arise. The solution was explained in detail in ways which were prepared to lead the student to see the relationship between the quantities involved. Methods were proposed for overcoming common difficulties in computation, as for example, the placing of the decimal point in the quotient. Since the solutions of 90 per cent of the problems dealing with dairy products involve a knowledge of percentage, arithmetical and algebraic explanations of percentage were given in a preface to the exercises. A suggested method for solving problems and a discussion on how to use the exercises were also presented in the preface. After a statement of the problem in each exercise, a solution of the problem was given and an explanation of the solution. Since each exercise should afford practice in developing the necessary abilities, a group of problems of the same type was placed after the explanation of the solution. Answers to the problems were also available, so that the student could check his own work, and thus save his own time and that of his instructor. These last two criteria, when followed in constructing practice exercises, make it possible for the student, after studying the solution of the problem, to practice that type of problem until his achievement is satisfactory. If he encounters difficulties he can refer to the explanation of the problem in order to define the difficulties and discover methods for overcoming them. An attempt was made to make the exercises within the read-

ing comprehension of the students. Pending objective studies of vocabulary and sentence structure for college students, subjective judgments of those who construct the exercises, of critics, and of students who use the exercises were used.

The problems were divided into five groups representing five classes of dairy products. By this procedure a student who wishes to find the explanation of a cream problem can readily turn to a group of milk-and-cream problems and locate the particular type of problem. The fundamental problems were placed in the beginning of each group so that the student might grasp basic relationships which are later found in the more difficult problems. Related problems were placed together in order of difficulty to maintain continuity of thought and ease of understanding.

Finally, opportunities were given the student to discover his weak points and to determine when he had strengthened them. Accordingly, tests covering the problems in each group were constructed to precede and follow each group of problems. By taking the pre-test the student can discover the problems in which he is weak. After study and practice, he can take the end test and determine how well he has strengthened those weak points and decide whether or not he needs further study.

Using these criteria a series of self-directive practice exercises were written for mathematics pertaining to dairy technology. The following example illustrates the type of exercise developed.

As an employee of a creamery, you will be called upon to determine how many pounds of cream are necessary

to churn a certain amount of butter. This exercise will illustrate how it is done.

Example—How much cream testing 30 per cent fat will it be necessary to churn in order to produce 360 pounds of butter? The overrun is 20 per cent.

The *amount of overrun* and the *amount of butter* made are computed on the *amount of fat* as the *base*. So if we let 100 per cent equal the amount of fat, the amount of butter made will be 100 per cent plus 20 per cent, or 120 per cent. This means that the butter weighs 120 per cent as much as the fat weighs. Then 120 per cent is the *rate* and 360 pounds (the weight of the butter) is the *percentage*. We can find the amount of fat (the *base*).

$$\begin{array}{r|l} \text{rate} & \text{percentage} \\ & \text{base} \\ 1.20 & | \quad 360.00 \\ & \hline & 300 \text{ pounds, weight of the fat} \end{array}$$

Now we know the weight of the fat in the butter (300 pounds). This must be the weight of the fat in the cream because the fat of the cream goes into the butter. For the purpose of the problem we will assume no fat losses in making the butter. We had given in the example, the fat test of the cream (30 per cent). This part of the exercise can also be solved by percentage when we consider the weight of the cream to be the *base*.

$$\begin{array}{r|l} \text{rate} & \text{percentage} \\ & \text{base} \\ \text{percentage of} & | \quad \text{weight of fat} \\ \text{fat in cream} & | \quad \text{in cream} \\ & \hline & \text{weight of cream} \\ .30 & | \quad 300.00 \\ & \hline & 1000 \text{ pounds, weight of cream} \\ & \quad \quad \quad \text{(answer)} \end{array}$$

PRACTICE EXERCISES

a) A dairy technologist desires to make a special order of 150 pounds of butter. He uses 35 per cent cream and

expects an overrun of 21 per cent. How much cream must be used?

b) The average overrun in your creamery is 22.5 per cent. How much 37.5 per cent cream must you use to make 425 pounds of butter?

c) You and your helper in the creamery are going to churn 310 pounds of butter from 34 per cent cream. The average overrun in your creamery is 19.5 per cent. While your helper is preparing the churn you must figure the weight of cream necessary. Do so.

d) How much cream testing 38.5 per cent fat must be used to obtain 850 pounds of butter? The overrun is 20.2 per cent.

e) In making 650 pounds of butter, how much 40.3 per cent cream will you use? The average overrun of your plant is 18.7 per cent.

EVALUATION OF THE METHOD

No matter how good a set of practice exercises appears when they have been completed, the evaluation ultimately rests on the effectiveness with which students who use the exercises achieve the desired objectives of instruction. Experimentation must be carried on to make this evaluation. Dairy technology students in five colleges and universities co-operated in carrying through an experiment for this purpose. The writer visited each institution, administered a pre-test, and collected data concerning each student participating in the experiment. The students were divided into two groups making them equivalent with respect to the data available. A set of the practice exercises was given to each student in the experimental group. Both groups were informed of the nature of the experiment, that the ability to solve these problems was important, and that a final test would be adminis-

tered at the end of twelve weeks. The experimental group was instructed to use the exercises in learning how to solve the problems, while the control group was asked not to study dairy problems any more than they ordinarily would in their regular classes. Both groups were also informed that the value of the experiment depended upon the honesty and integrity of the students in carrying out these instructions. The procedure in the use of the practice exercises was quite different from one in which a course with credit might be organized and an instructor and schedule provided. It was also different from a procedure in which the practice exercises might be used to supplement the regular dairy technology courses. That, however, was the purpose of the experiment—to determine the progress that might be made even under the extreme condition when the students were given the exercises with the foregoing instructions but with no program for faculty assistance.

The students who had the practice exercises made a progress of 4.2 points on a scale of problem solving in dairy manufacturing. The students who did not have the exercises made a progress of 2.0 points. The difference in progress of the two groups was 2.2 points. This difference is too great to expect as a result of chance alone. Hence the students who had the practice exercises made greater progress than the students who did not have the exercises.

Is the difference in progress between the two groups worth while? Comparisons with other teaching procedures, intended to accomplish the same results, can be made in or-

der to evaluate this difference. If students who use the practice exercises progress more rapidly in achieving the objective than students in a special course provided by a college, the use of the practice exercises by students will save the students' time without increasing the expenditures of the college. It will be recalled that in this experiment the students were given the exercises to study as they saw fit; no course was provided with credit and the instructors did not correlate the exercises with their courses. The method used in the experiment represents one extreme and that of a regular class represents the other extreme. Comparisons of these two extremes will help to indicate the value of the differences of 2.2 points in the progress of the two groups.

In one of the institutions, some of the students of each group had college mathematics during the experimental period. Courses in college algebra and plane trigonometry are required in the department. This requirement was intended to assist the student in reaching this objective—the ability to solve mathematical problems encountered by dairy technologists. Students who have had college mathematics during the experimental period, then, would be expected to make more progress than those who had not. An examination of Table I indicates that this was not the case. The progress of the students was the same whether they had college mathematics or not during the experiments. For the control group, the students with college mathematics and those without college mathematics made the same progress. The same was true for the stu-

dents in the experimental group. Those without college mathematics but with the exercises made two points more progress than those with college mathematics and without the exercises. The results

by the evidence in Table II. For each group, the students who had the course during the period, made greater progress than those who did not have the course. Students who had both the exercises and the

TABLE I

MEAN PROGRESS OF TWO GROUPS OF STUDENTS IN ONE INSTITUTION WITH AND WITHOUT COLLEGE MATHEMATICS

	Experimental Group	Control Group
With college mathematics during experimental period	4.3	2.4
Without college mathematics during experimental period	4.4	2.5
Both groups	4.4	2.4

showed that the practice exercises were of greater assistance to the students in solving dairy problems than were these mathematics courses.

All freshman dairy technology students in this institution are required to take a course in the principles of dairying which takes up some dairy problems. To determine further the social significance of the practice exercises, comparisons were made between students of the experimental and control groups who had the course in principles of dairying during the experimental period and the students of each group who did not have this course. Again it is shown in Table II that each experimental group made greater progress than either of the control groups. Since dairy technology problems are taken up in the course in principles of dairying, we would expect that the students, who had the course during the experiment, would make greater progress. This expectation was upheld

TABLE II

MEAN PROGRESS OF TWO GROUPS OF STUDENTS IN ONE INSTITUTION WITH AND WITHOUT THE PRINCIPLES OF DAIRYING COURSE

	Experimental Group	Control Group
With Principles of Dairying during experimental period	4.7	3.5
Without Principles of Dairying during experimental period	4.2	2.0
Both groups	4.4	2.4

course in principles of dairying made the greatest progress. In the experimental group, the students who did not have the course in principles of dairying made nearly as much progress as those who had it.

Still a third comparison may be made. This will not show the importance of the difference in the progress of the two groups, but will help to interpret the value of the exercises. This comparison involves the average pre-test score of the sophomores and the average final test score of the freshmen. How does the achievement of the sophomores after their first year in the department of dairy technology without the use of the exercises compare with the achievement of the freshmen at the end of their first half-year? The data for this comparison are given in Table III. The achievement of the sophomores at the beginning of their second year and before they had used

the exercises was 8.1 points on the pre-test for those who later were in the experimental group and 8.0 points for those who later were in the control group. On the final test, the achievement of the freshmen

score of all the sophomores was 8.1 points, while the final test score of all the freshmen was 8.4 points. This comparison is important since it indicates that the freshmen students reached the achievement of the sophomore students in one-half the time.

Although the comparisons of these groups have the limitation of a small number of cases in each group, all the differences in progress were consistent and indicated that the students who had the exercises made greater progress in solving dairy problems than the students who did not have the exercises.

SUMMARY

This brief description illustrates a method for constructing self-directive practice exercises. The use of self-directive practice exercises in problem solving in dairy mathematics is suggestive of their use in removing deficiencies of college students in educational fundamentals without increasing financial expenditures.

TABLE III

MEAN ACHIEVEMENT OF SOPHOMORES ON THE PRE-TEST AND OF THE FRESHMEN ON THE FINAL TEST

	Experimental Group	Control Group
Sophomore pre-test	8.1	8.0
Freshman final test.....	10.6	5.8

students who had the exercises was 10.6 points and the achievement of the freshmen students who did not have the exercises was only 5.8 points. The freshmen students in the experimental group, then, have not only reached the achievement of the sophomore group at the close of a year but have gone beyond it in one-half of the time. The freshmen students who did not have the practice exercises have not reached the pre-test achievement of the sophomore group. The pre-test

The Nature and Purpose of Examinations

H. B. WYMAN*

As an expert in the field of testing I come "with clean hands and a pure heart," making no claims to such distinction. As a matter of fact I doubt whether I can subscribe to "testing." The term is appropriate in industry where a piece of steel, rubber, or other material is subjected to standardized stresses and strains to see how much it will stand before breaking. The situation in education has been definitely of this sort but shows many flushes of a better day. The term "examination," while too narrow, is more apropos whether applied to the individual subjectively or objectively.

With a word, I shall dismiss the discussion on "Testing and Remedial Teaching to Remove Deficiencies in Educational Fundamentals" because of its close relationship to the problem as a whole. Obviously there are many such deficiencies in what we are generally agreed are fundamentals. If they are fundamentals and the student's inadequacy along these lines is ascertained, there can be no justification for failing to incorporate these fundamentals into the thinking of the student. For example, the common insufficiency of the lower-division student in reading ability cannot be ignored. While the college resents the fact, it remains that it must teach reading, at least on the

college level. That practice exercises will help the student to solve a particular difficulty such as those arising in dairy technology there can be no doubt. The mature college student, however, should be able to understand in a very short time the fundamental principle involved in the specific problem. A principle is a generalization which by its very name and nature is applicable to any number of situations. To assume that this generalization will come out of a large number of specific cases is unwarranted.

At this point the discussion will turn to the whole problem of the nature and purpose of examinations. Time demands brevity which leaves many elaborations and details to the hearer. The purpose of examinations is properly considered first because it determines their nature. The examination, in addition to the undisputed motivation which it affords, may be made to contribute to one or more of the following purposes: (1) to determine the student's ability to give the factual material covered in the particular form required by the examination; (2) to serve as a basis for giving the student a grade; (3) to serve as a basis for determining the student's ability to apply the principles involved; (4) to serve as a partial basis for predicting the probable further success of the student; (5) to serve as a learning device enabling the student to organ-

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ize, classify, and refine his set of meanings; (6) to evaluate the efficiency of the learning process as revealed in the ability of the student to think intelligently in the field, or concerning the field, as the only adequate basis for making education co-terminus with life.

It is strikingly true that "as we test, so do we teach." Show me a teacher's tests and I will tell you what his aims are, or at least what they should be. If he has any concern whatever for consistency he will teach to attain the ends set up in the examinations and in the course. If the examination is of the purely factual sort you may be sure that, in so far as any effective aim is present, it is that the student master the facts of the course. That the facts may be valuable should not be ignored; in so far as they are valuable, let us get the facts. The "and how!" of the college student is of vital importance to the educator.

The nature of the examination is paramount because of its vital relationship to the learning process. There are in general two types of written examinations, the "objective" and the "essay." The objective type of examination makes a widespread appeal to teachers. We are not unlike children in that we wish an immediate and definite answer to our questions. Mass education favors the objective type of examination because any hard-pressed student can be employed to do the scoring for a paltry sum. We need to take cognizance of one fact that is usually unrecognized, to wit, that the objectivity of which we speak is largely mythical. The objectivity is in the scoring of the examination, as Dr. Tyler has duly

recognized. This objectivity is sometimes bought at the sacrifice of good judgment. The place of such simple answers given with the characteristic finality of this type of examination is definitely limited. The subjectivity enters when the teacher decides to accept "slavery" as the major cause of the civil war, or the "Bible" as the greatest book ever written. Obviously the subjectivity has been shifted from one position to the other.

The emphasis in the objective examination is usually placed upon facts which mean memory and fixed habits as the foundation of learning. An examination very nicely adapted to a limited scope of values in certain fields has been taken as satisfying every need in all subjects. Such child-like faith is unwarranted. While many claims have been made for thinking on objective tests, there is no evidence of such on the student's paper. True, some thinking will take place in spite of our best laid plans, but the very nature of the usual examination of this sort discourages thinking. This is particularly true where a large number of items are covered in a limited amount of time. From the still most prevalent point of view, the greatly-to-be-desired goal is hair-trigger action or automaticity of response. In such an examination, "he who hesitates [to think] is lost." I can hear you say, "But on the type of examination I give there is opportunity for abundant thinking." Granted! My statement was that there is no evidence *on the student's paper*, hence too much stress should not be placed on this feature of the examination. I shall refer to this again in connection with the discussion of

the other type of written examination.

The essay type of examination of the past is deserving of many of the vile things that have been said about it. The "tell all you know" form of question is condemned at the outset. Just as Dr. Tyler and others have been remaking the objective test to the end that it may retain some of its objectivity while taking account of more important values, just so are things happening to the essay examination. We hold no brief for the form referred to and shall concern ourselves only with the reorganized essay or problem type of examination. This sort of problem requires a unique quality on the part of the student. In the first place, it demands a careful discrimination and evaluation of every item concerned. He must not only have information at hand but he must know its significance in the particular field and to every ramification of the problem. Secondly, there is required the organization and statement of one's thinking in concise English. If thirty minutes is allotted for the problem, probably twenty should be spent in organizing the statement of one's position and ten minutes in writing it. This is a radically different thing from the loose rambling manipulation of data and hypotheses that may suffice in answering a question by one or two words. A third and most important value is that of giving the student a chance to state and defend his position. A student accustomed to doing this resents the dogmatic finality of the objective test. One college professor, whom I know, allows the student to write two lines of explanation on each true-false statement. This is one

of the most candid apologies for the test that has come to my attention.

Knowledge is power only when it gives increased control. Facts alone are often of no functional value. A good essay examination puts facts to work in the same sort of a thinking situation from which they normally issue. The end served is that more refined and more extensive meanings are produced.

By way of recapitulation: like a boy with a new pony, we have ridden objective tests to death. That there is much good in them, I would be the first to concede; that their value and usefulness is rather narrowly circumscribed must be recognized. It is encouraging that they can be refined and their legitimate use extended, but many of their limitations remain. To recognize as correct one of several principles suggested is important; to formulate this principle on the basis of data presented is still better; but to take a problem, analyze the data, project and evaluate hypotheses, and give a clean-cut resolution of the difficulty requires a genuinely functional type of knowledge which is truly power.

The work of Dr. Tyler and his associates is outstanding. One of the more recent books on examinations, *Comprehensive Examinations in American Colleges*, by Jones, makes frequent reference to the work which is being done at Ohio State University. This work is pointing the way to continually broader uses of this device. The man in the field owes a heavy debt to such splendid and untiring research.

Examinations, like education in general, are on the move today. Per-

haps the most significant trend is that toward comprehensive examinations. It is in this direction that the Phoenix Junior College is moving. These examinations are likely to be one of two kinds. The most common one is an examination of the objective sort meant to give an adequate sampling of the whole field of knowledge that should be familiar to the student. The material is usually predominately, if not entirely, factual in nature. There is something to be said for this form of examination, but my interest lies in the sort of a comprehensive examination which pulls together at the end of a semester, a year or two years, the results of all of the student's experience. This examination should be distinctly of the organization type. Problems should be set up that will cut across every field of knowledge and every experience of the student, bringing the contributions of each to bear on their solution. If the lower-division college fulfills what I believe to be its major function, that of rounding out the period of general education, the end of the sophomore year is the logical time to take stock of this groundwork of the student. He should not only be able to think intelligently within the various fields in which he has taken work but he should be able to think intelligently about the other major fields of knowledge. Certainly in this field of general education, subjects should be means not ends. If this were followed it would bring about overpowering and significant changes in courses, and credit hours would become matters of minor importance in education.

The new-born child comes into

the whole field of knowledge, there being no geography, no arithmetic or chemistry there. Later, when his experience permits, we set up certain classifications of knowledge, or channels through which he moves. These are made necessary in order to deal with the baffling complexity of human knowledge. Heretofore, education has sometimes left him at this point, buried in one or two subjects. It must, however, see that subject-matter lines are melted away and that the student ultimately stands again at the portals of the entire field of knowledge which he can now view as a unit. This elimination of subject-matter lines cannot be done in a day. At every turn the teacher must have a concern for showing the organic unity of all subjects. This cannot be done by the examination alone, regardless of how good the examination may be. It must be insisted that the type of examination in which the student never rises above the recognition of the correctness or incorrectness of a statement is inadequate. To be able to give short objective answers to a large number of questions in a given field guarantees nothing beyond this ability. What is needed is a thorough reorganization of teaching and learning so as to place a premium upon a body of knowledge that is comprehensive in its scope and in its significance. The comprehensive examination, looking to these values, is an indispensable aid. At the end of his formal education the student should have an integrated picture of human achievement and a philosophy of life adequate to meet the exigencies of a rapidly changing social order.

Regulations in Private Colleges for Women

EMMA I. SISSON*

The restlessness of students is finding constant expression in many phases of the so-called youth movement. The opposition of students to any type of restrictive living is not a new condition. The private and public school or college both face this situation; the student "strike" seems no longer abnormal. To those of us in the junior college field the restlessness is perfectly apparent. For this we are disposed to blame the absence of restraint in the home, and, to express it tritely, the flaming spirit of modern youth demanding unlimited and unrestricted freedom. This may be true in part, but should we not possibly also look within and ask ourselves if in a new social order we are not still maintaining the old-fashioned boarding-school attitude and expecting college-minded young women to adapt themselves meekly to a hothouse atmosphere. This may be due to the fact that many private junior colleges were formerly finishing schools where the emphasis was placed on social training. The presence of a high-school department in some schools has presented a very definite problem in the matter of regulation. It is true that in the private junior college we do assume a definite responsibility and promise a careful supervision of our students. This is as it should be and is one reason why many parents prefer the junior

college. We do not have the influence, the maturer judgment, nor the assumed self-sufficiency of the upper two college classes to guide student opinion. The responsibility of maturer judgment, however, is forced upon students who are sophomores, but are carrying on student activity duties of seniors in a four-year college.

For many years now most colleges have had some form of representative government controlling regulations and discipline. These organizations were formed presumably to give students representation in legislation and to train them for citizenship. They follow more or less the same outline: a student governing body, a faculty advisory group, and a provision for administrative control. Some colleges have a community form of government in which legislative power is vested in two bodies, faculty and students. This form usually embodies all campus organizations. One college has a unique plan which might interest us because the gap between student life and faculty is bridged by an equalization of responsibility to the organized life of the community. The following is one statement of membership: "All faculty members, administrative assistants, and students are members of the community, and as such will be expected to conform to the regulations and plan of government as herein set forth."

All colleges have regulations protecting academic work and the wel-

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fare of campus life in general which show much similarity. These regulations fall into four groupings: (1) those relating to academic standards; (2) those relating to the life in the dormitories such as quiet or study hours, light regulations, use of musical instruments and electrical appliances; (3) those which are personal in character, such as type of clothing that may be worn, the use of cosmetics, smoking, card playing, church attendance, and dancing; (4) those controlling the social life of the student, the number of privileges accorded, when and under what conditions students may leave the campus, where they go, what they may do, the conditions under which they may meet and be with young men, and riding in cars.

The same social and personal problems are recognized and provided for in all types of colleges. Regulations taken at random from a group of something over sixty representative junior and senior women's colleges will illustrate this point:

Dress regulations vary. All make some statement as to where and under what conditions certain costumes may be worn: some require strict "uniform" for day and evening; some require regulation colors for street wear; many have no regulations.

As regards the use of cosmetics, some schools prohibit their use entirely, some allow their use at specified times, while many have no restriction at all.

Card playing is allowed in some, some restrict it, while a few prohibit it entirely. In one, playing cards for money is prohibited on the campus.

Dancing regulations are very different. Some prohibit dancing entirely, some allow it only on the campus, many permit it off campus under chaperonage and at specified places, some permit it off campus without chaperonage, but at specified places, and a few have no restrictions.

Smoking regulations are also very different. Some prohibit smoking entirely, many permit it on the campus at specified places, some permit it off campus only, while a few do not mention it at all.

Drinking is mentioned by only one college with the statement that it is allowed for medicinal use only.

Riding in cars is prohibited except under chaperonage by practically all institutions and those limit it to seniors only or by special permission from parents.

The question of privileges is apparently considered most important as protection to academic work. Some state definitely the number of privileges in a week and in a semester, some restrict all privileges to the week-end, some differentiate as to a student's classification in kind and number, and some leave the matter to the discretion of the student. Almost all colleges have some regulation as to academic standing and privileges.

With reference to campus leave regulations, all colleges state definitely the length of time a student may be away. Some require permission for all leave, some for night leave only, some for week-end leave only. Some require chaperonage at night. All have some restrictions in regard to night leave. All have some restrictions as to where students may go day or evening or both.

Regulations in regard to young

men are also varied. Some do not allow students to be with them at all except under chaperonage. Some require chaperonage only at night. A few require no chaperonage at all.

A parent's signed statement is required by the few junior colleges which permit any great degree of freedom in personal and social life.

Naturally in the outline above there has been no attempt to express opinions or contrast values. The summary of practices certainly shows lack of uniformity or common ideals among us.

In the formulating of regulations, colleges vary as to the degree of student participation in legislation. Some are very liberal and extend to the students legislative power in all matters except those pertaining to classroom conduct and actual house-keeping arrangements. These groups are self-governing in that each student is responsible for her own conduct; is under obligation not only to conform herself to standards laid down for the group, but to co-operate in holding others to those standards. This self-governing type of organization exists mostly in the four-year women's colleges. Some junior colleges are experimenting with this at the present time with the idea that liberal student participation should bring co-operation. It might be interesting to quote statements made by two of the women's colleges:

Whereas the students desire to assume individually and collectively a responsibility for the conduct of students in their college life, and whereas it is believed that such responsibility if given to the students will make for growth in character and power, and will promote loyalty to the best interests of the College, the President

and Faculty, with the sanction of the Trustees, do hereby authorize the College Government Association, and do charge this Association to exercise the powers that may be committed to it with most careful regard both for liberty and order, for the maintenance of the best conditions for scholarly work, and for the religious life of the college.

These rules are based on the general principle that every student shall conduct herself at all times in such a way as to uphold her own good name and that of the College. They are framed to insure the safety and general welfare of the student body. These regulations cannot, in the nature of things, be equally acceptable to every student, for they have been drawn up with a view to the interests of the individual as a member of a community and therefore recognize certain rights of the community over the individual. The obligation of the student to conform to these regulations is not lessened by this consideration. Because the Student Government Association believes that a willing and intelligent support to a few fundamental and comprehensive rules can be given by every one, it has not attempted to lay down specific rules of conduct.

Because all members of a community cannot be trusted to be ideal citizens, penalties seem to be a necessary corollary of law. Penalties are imposed in one of three ways: (1) by student court—students responsible for enforcement and under administrative control only; (2) reports made and penalties imposed by students, faculty, and administration acting separately; (3) penalties imposed by student court only subject to faculty and administrative control.

The problem of penalties presents infinite difficulties and opens

up a vast field for discussion. One question for us to consider is whether or not rules and their consequent penalties accomplish the desired end. Our aim is to teach good taste, modesty, honor, loyalty to ideals, and other attributes. Penalties only temporarily deter; they do not convince, for released from the fear of penalties as soon as students are free from campus restrictions, they more or less disregard conventionalities under which they have been presumably living. This is a discouraging realization, as we might hope that students would have grasped the ideal embodied in the regulation.

Rules should of course be rigidly enforced, but the persistent breaking of any rule for whatever cause is not only disastrous to the individual, but destructive to the morale of the group and should be a matter for investigation as to whether the rule should stand or whether its usefulness had passed. In a representative form of government laws should not be arbitrary. They should be the expression of the standards of an entire community if they are to be obeyed or enforced with any degree of fervor.

Student legislation in junior colleges in general is rather restricted; regulations are mostly prohibitive and responsibility for the enforcement is divided among student, faculty, and administration. The regulations that have caused the greatest degree of unrest and irritation are those relating to social life and personal privileges. We have been far less plastic than our big sisters and have possibly made the mistake of fighting changing social standards by imposing prohibitions instead of meeting them

and teaching discretion. We have been afraid and perhaps we have resorted to school discipline instead of emphasizing self-discipline. It is easy to satisfy our conscience by making rules for the breaking of which we expect our student councils to impose penalties. Under present conditions students are not willing to go into or to remain in an environment where the social conventionalities are different from the world of their own age. Our problem then is to meet the demands of a changed social order and the desire of young people for freedom in their personal life and at the same time to give the protection to which we are pledged and which we believe desirable and necessary for young people at any age. In meeting these demands, we must be careful not to relinquish our standards, but we must face issues clearly and honestly.

Character and knowledge are the only safeguards for life, and certainly is this true in this time of rapidly changing social values. To guide character requires intelligent discriminating personal work and involves courage, patience, time, and energy. In the classroom students are coming in contact with many phases of knowledge and are being taught to think, our school organizations are attempting to develop leadership and initiative—all presumably for life's sake. Should we not provide for intensive moral training and guidance and then have the courage to make our college not a cloister, but a laboratory where under the best possible conditions students may be given the opportunity to make correlations between what they are learning and what they are living?

Federal Aid for Private Junior Colleges

E. E. CORTRIGHT*

To carry any proper weight in responsible quarters, a matter of such extreme importance as the topic of this paper would indicate must represent something other than the needs of a single institution or the opinion of an individual administrator. I have, therefore, sought facts and opinions from private junior colleges scattered over the country and have used these findings as a basis of the recommendation at the close of this paper.

The following conditions were arbitrarily set up in selecting junior colleges to ask for information: the junior college must have been in operation at least four years; it must have been included in the latest list of the American Association of Junior Colleges and have reported the attendance of at least 50 students; and it must not be a military-training institution or a teacher-training organization.

Replies were received from 64 institutions. Eight of these, however, were general letters or gave such partial information that they were not included in the findings. Four came too late to be included. The results, then, represent 52 private junior colleges.

FACTUAL MATERIAL

Attendance.—The 52 institutions report 4,371 college freshmen (thirteenth year) and 2,668 college sophomores, or a total of 7,039. The average of 135 students produces a

typical private junior college according to the statistics of the Association's latest report. The findings, therefore, should be typical and representative of conditions in the whole field.

Students receiving assistance.—In three institutions no funds are available for assistance of any character. In 49 institutions 35 per cent of the students in attendance are receiving aid in some form, varying widely in character and amount. If no other factor were considered than that of numbers, the percentage could easily be considered satisfactory.

Student assistance funds.—Ten institutions reporting some form of student assistance—probably in the nature of work—fail to report any amount of money this year to be applied to this project. The report from 39 institutions shows that \$235,548 is available. These 39 institutions report 6,029 students, so that the per capita assistance available is about \$39.50.

Qualified registrants refused.—Whatever the amount of money available for student assistance may have been, it was insufficient to allow the attendance of nearly two thousand qualified students in 1933 because the funds for assistance had been exhausted. In 37 institutions there were 1,936 qualified registrants last September that the college was unable to accept owing to insufficient funds for assistance. Put in other terms, one out of two qualified applicants were

* President, Junior College of Connecticut, Bridgeport, Connecticut.

refused, since these 37 institutions accepted 1,905 freshmen.

Tuition rates.—More than a dozen institutions reported the total charge without separating tuition from dormitory charges. I am, therefore, unable to state any definite facts under this heading. One thing is clear, however, that within the 52 reporting institutions the tuition varies widely, ranging from \$150 to \$600.

Income from productive endowment.—One of the remarkable facts revealed in the survey is that 49 of the 52 institutions have built up some productive endowment. True, the total is wholly inadequate, but the fact that in so short a period as the junior college has existed it is possible in 49 institutions to report income of \$126,632 from productive endowment is one of the heartening facts in the situation. If there were no other demand upon this income than that of student assistance, however, and this of course is not the fact, it would amount to less than \$20 each for the students in the 49 reporting junior colleges.

Receipts from sponsoring organizations.—A considerable number of institutions report receipts from sponsoring organizations. Since these receipts, however, are reported by the same institutions in the following paragraph and disappear as a part of the operating costs, I can draw no inference from their presence. The probability is that they serve no purpose in addition to the purpose covered in the following paragraph.

Gifts allocated to operating budget.—The seriousness of the straits in which the reporting institutions find themselves is probably no more clearly reflected anywhere than in

the reply to this. Gifts of \$102,384 were received. This is splendid. But, instead of using these gifts to build up permanent productive funds, it was found necessary to allocate them in 1932-33 to meet threatened serious deficits in operating budgets. This is a terrific drain upon the friendship and good will of benevolent people and over a period of years, if continued, must result in weakening the institutions. It is a most regrettable fact.

Annual interest charges.—One of the important disclosures of the inquiry is that 38 reporting institutions are paying interest annually to an amount of \$128,575. This represents 6 per cent on more than two millions of debt and points to the necessity for a different type of relief than can be met by temporary measures which provide small amounts of tuition for a fraction of the students in attendance. When one considers that the income from invested funds in the 49 institutions reporting such funds represents at 4 per cent net a possible total of slightly over three million dollars, the fact that within that same group institutions are paying interest upon two millions of debt makes the amount applicable to students as net income from invested funds pitifully small. The good will reflected in the willingness of friends to donate more than \$102,000 in a most difficult year is an asset of tremendous value and one that should be capitalized by arrangements that will make it unnecessary for these funds to be used to meet either interest charges or operating deficits. This good will should result in placing a majority of these funds in the permanently invested group or/and utilizing

them to reduce the funded debt. One cannot escape the inference from the foregoing facts that operation under the trying conditions of 1932-33 is distinctly unsatisfactory.

OPINIONS OF ADMINISTRATORS

With regard to the administrative type of junior college which should be considered eligible for federal emergency assistance, the opinions as expressed under the four headings below are rated as nearly as certain inequalities of expression can be interpreted.

Church affiliated colleges.....	65% Yes
Church controlled colleges....	50% Yes
Proprietary colleges (operated for profit)	90% No
Udenominational, non-profit colleges, with boards of trustees	95% Yes

With no belief that any original proposals would cover the necessities of the case, it seemed advisable, however, to focus the attention of private junior college administrators upon certain definite possible forms of federal relief. The following questions were included with the results indicated.

"For your own institution, which type of assistance, if any, would you probably apply for?"

- a) Direct awards for student assistance, about 50 per cent.
- b) Reduction of overhead through substitution of governmental 4 per cent bonds for 6 per cent long-term obligations, 90 per cent.*
- c) Amortization of existing debt through establishment of sinking fund with annual deposit representing the savings through (b), with interest at 4 per cent compounded semiannually, 95 per cent.*

* Of those reporting interest charges.

With regard to (c), several presidents declared that 4 per cent was entirely too much and since bills have been introduced into Congress pointing in the same direction and providing for an interest charge of 3 per cent, this would probably be considered the correct level.

DEVELOPMENTS IN CONGRESS

We are all aware that Harry L. Hopkins, Director of Federal Relief Administration, has taken emergency action and provided federal aid for students unable to remain in college for the present semester and for strong students unable to enter last September for financial reasons, to a total of 10 per cent of the October 1933 registration. The average payment of \$75 per student per semester on the basis of extra work on the campus are features of the plan. This is the only concrete development to date (February 17) in our immediate field.

Senate Bill 2436, introduced by F. Ryan Duffy, Senator from Wisconsin, reads as follows:

That section 5 of the Reconstruction Finance Corporation Act, as amended, is amended by adding at the end thereof the following new paragraph: The Corporation is further authorized to make loans to public and private colleges, universities, and institutions of higher learning, or to corporations organized under the law of any State for the sole purpose of transacting business in the interest of any such college, university, or institution of higher learning, to aid in the financing of dormitories and other self-liquidating projects, to aid in the refunding of the funded debt upon dormitories and other self-liquidating projects, and to aid in the refunding of student loans advanced by colleges, universities, and institutions of higher learning and

properly endorsed by them; except that the interest rate to be charged by the Corporation in the case of any loan under this paragraph shall not exceed 3 per centum per annum.

House Bill 49, introduced by Mr. Guyer at a previous session of Congress, is the counterpart of Senate Bill 2436.

These bills, in my judgment, aim in the right direction but their provisions are insufficient. Of necessity, colleges have only a minor number of self-liquidating projects. Probably less than 10 per cent of the total college financial problem lies in the field of self-liquidating projects. The business of colleges is to find a way to meet the terrific expense in connection with instruction—laboratories, recitation halls, libraries, auditoriums, etc. — and not in connection with dormitories and eating places. I believe that we should face this whole matter squarely. If colleges in America have a national value through services that no other organization can render, then relief should be given to them in these times of terrific strain where they need it most and where 90 per cent of their difficulty lies. I have taken the liberty to address a letter to Senator Duffy and have asked him to consider broadening the scope of the provisions in Senate Bill 2436. I have also addressed a letter to presidents of private junior colleges quoting the provisions of this bill and asking them, if interested, to communicate with their representative in Congress in an attempt to get the provisions of that bill broadened.

In no uncertain way non-profit, liberal arts institutions, though privately controlled, are engaged in the nation's business of public edu-

cation with no possible ulterior motive. Without difficulty one can easily prove that church-related and independent institutions are publicly supported, that is, sustaining support comes from a fraction of the public and not from the consumer, who is the student. They are in that very act rendering an important public service.

This crisis in higher education is not confined to the junior college field. At the twentieth annual meeting of the Association of American Colleges in St. Louis a month ago, the following telegram was sent to President Roosevelt:

Since many young men and women qualified to enroll in our colleges and universities have not been able to do so through lack of funds, and since it is evident that many students now enrolled will have to drop out at the end of this semester, thereby increasing the number of unemployed;

We therefore petition the United States Government through the CWA, CWS, or other appropriate funds, to provide financial aid for college and university students in tax supported and endowed colleges and universities (chartered not for profit) through the agency of the institutions themselves;

We further petition the United States Government through the RFC or some other agency (1) to lend money directly to the colleges and universities on secured student notes given in payment for tuition and other regular fees; (2) to lend money directly to the colleges and universities for the purpose of refinancing existing obligations at a low rate of interest, similar to the plan under which such loans are granted to tax supported institutions; and (3) to lend money to colleges and universities, at a low rate of interest, to carry through to completion building projects which had been projected and announced at least three years ago.

GENERAL COMMENTS

Privately controlled colleges — both senior and junior—are conservation camps of the highest order for young men and women eighteen to twenty-two years of age. Contrary to common belief, the students attending these institutions do not come in any overwhelming numbers from homes of wealth. They can attend these private institutions only because in the past individuals have been willing, through direct donations or invested funds, to make up the difference between the cost of education and what the student could pay.

But these donations and benefactions have been seriously curtailed and for most institutions have vanished altogether. Unless relief for these institutions can be had, thousands of young men and women will be forced to leave them and either join the great army of unemployed or in those states where there are tax-supported schools of college grade they will probably register and, because the numbers are large, will increase the taxpayer's burden.

In these slightly over two hundred private junior colleges in America, there are registered practically 35,000 young men and women. Most of these institutions are relatively new and have not had the opportunity to build up any considerable amount of resources in the form of invested funds. They do, however, offer to the youth nineteen and twenty years of age a rich educational and social opportunity. Completely outside of the value of his curriculum either for the present or the future, it does give him a program of activities both whole-

some and prophylactic. He is not unemployed, with the accompanying decline in self-respect in physical, mental, and moral morale and in the dangers of seeking excitement in activities that may easily become criminal.

In a study of 80,785 documented, finger-printed cases of crime in the first quarter of 1933, the United States Department of Justice discovers that 40 per cent of this crime is committed by youth—youth under twenty-five; and that the age of nineteen is the crime Vesuvius in America.

There are about eighty millions of people in the potential crime age, fifteen to sixty-five, and twenty-two and a half millions of these are "youth," fifteen to twenty-five years of age. When 40 per cent of the total crime is committed by 28 per cent of the potential crime population, the crime percentage for this "youth" is 42 per cent above the average. This notorious situation, however, is produced by *youth out of school*.

The Chicago Crime Commission, after five years of investigation, reports that the average cost of conviction for crime in America is \$2,000. At this figure, crime committed by youth (under twenty-five) in America at the rate of the first three months of 1933 costs the taxpayers 258 millions of dollars in 1933 simply to secure conviction.

The later care over an indefinite period of years costs more than a thousand dollars a year per convicted person. Fortunately for America, about 98 per cent of this crime situation is produced by youth out of school. Schools and colleges are the most effective agen-

cies of social insurance thus far developed by a free people. Because of this fact and the service they render in providing worth-while programs for youth at its most explosive age, they are a national service agency in a position to expect and to receive governmental assistance in order to continue their program and to expand their services.

CONCLUSIONS

In the light of these facts and considerations, I am taking the liberty of making the following recommendations:

1. That a telegram be forwarded immediately to President Roosevelt indorsing the statement of the Association of American Colleges, together with such additions as will complete the picture of the needs in private junior colleges.
2. That a legislative committee be appointed to confer with United States Commissioner George F. Zook on ways and means of the best procedure to secure the attention of Congress and of the administration to the matter of the need for federal assistance and relief for strategically located, soundly organized and administered junior colleges.
3. That this Association indorse the presentation of the claims of private junior colleges, as well as senior colleges, for federal assistance under four headings as

follows: (a) the extension of present unemployment relief provisions for a period not to exceed two years through attendance at college as one form of student assistance at the rate of \$100 a semester; (b) provisions that some governmental agency shall be authorized to refund to colleges the loans made to students under such conditions as may appear equitable; (c) the authorization of some governmental agency that will provide for the substitution of 3 per cent government bonds or certificates for long-term loans in sound college organizations, both senior and junior; (d) that some government agency shall be authorized and given the power to effect arrangement for amortizing existing debt of sound colleges — junior and senior — through the establishment of a sinking fund with semiannual deposits so that the amortization would be effected within a period not to exceed thirty years.

[NOTE: The private junior college group appointed a committee to co-operate with a similar committee from the public junior college group concerning a desirable program for federal aid. These two committees united in a recommendation for a committee to represent the American Association of Junior Colleges on this vital subject. See page 472.]

The Closing of Crane Junior College

J. LEONARD HANCOCK*

To understand the closing of Crane Junior College one must understand, as background, the Chicago and Illinois situation as a whole. The Illinois tax law is antiquated, dating from the time when the state was purely agricultural. It permits no discrimination between types of property; it puts all of the burden on real estate; it taxes tangible personal property and leaves untaxed the real wealth of the present state, intangible personal property.

A re-assessment, ordered in 1928 to cure inequalities, was delayed by political sabotage and prevented the paying of any taxes for three years. Meanwhile came the depression and actual inability in many cases to pay. A tax strike was organized, chiefly by real estate men, and still persists in the face of legal action. Last May, 29 per cent of the 1929 taxes and 43 per cent of those for 1930 were still delinquent. Note, however, that of the unpaid taxes 61 per cent were in bills of \$10,000 or over and only 4 per cent in bills of \$300 or less. The small home owner was paying his taxes!

The Board of Education, under these circumstances, ran hopelessly into debt. Its members, with all their faults, are not grafters or profligates. Their tax anticipation warrants (for 75 per cent of anticipated revenue) have regularly been bought by the banks, have paid 6

per cent interest, and have been paid at maturity. There was no waste of money, at least on the educational side. Recently, however, the banks have refused these warrants, and "debt service" (interest and retirement of bonds) consumes nearly a sixth of the annual budget.

With taxes still unpaid, a Citizens' Committee was self-organized. It contained some of our foremost citizens. It could have done the community a great service. It boasts that it did. But note that, of its twenty-nine members, all are Union League Club bankers or "big-business" non-professional men; seven are not Chicago residents and fourteen live on the "Gold Coast"; six are non-voters; only three have ever had children in a public school. This committee has forced the Board of Education to lower its budget far below the "emergency minimum" set up by the Strayer report, far beyond the reduction required of any other city or county budget, with the explicit promise that if the Board obeyed orders the banks would make the loans (at 6 per cent interest!) required to pay the back salaries of the teachers.

The teachers are still owed nearly seven months' salary. In other words, where banks, backed by the Citizens' Committee, refused to lend on good collateral at 6 per cent interest, the teachers of Chicago have lent the Board of Education, without interest, for nearly three years, an average of \$24,000,000!

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After Mayor Cermak's death, Edward Kelly became Mayor—not by election, but, by a specially invented device, by the selection of Patrick Nash and the City Council. Early in May he named five new members of the Board of Education, and, on July 5, two more. Not one of them was on the many lists of nominations made by civic organizations; not one was even known to the public, or remotely connected with education. On July 12, after several secret sessions from which they barred Mrs. Hefferan, the senior member of the Board and the only one acquainted with educational problems, these men announced to Chicago (and to Superintendent Bogan) not mere economies, but reforms in education which included the abolition of Crane Junior College and of all junior high schools, the assigning of two schools to each elementary principal, an increase of 40 per cent in the teaching load of the high-school teachers (already heavier than in any other large city), and the cutting out of such “frills” as vocational guidance advisers and deans in the high schools, and physical education and manual training in the grades.

In such a wrecking program the closing of the College, turning on to the streets its 3,500 young people, was only an item. To this writer it seemed less dangerous educationally to the pupils than the increased burden put upon principals and high-school teachers. But President Hutchins of the University of Chicago ended a slashing editorial in the *Chicago Herald and Examiner* of July 17, 1933, with the words: “The abolition of the Crane Junior College is the most serious of the

crimes of the Board of Education. But all the rest of their actions reflect the same perverse misunderstanding of public education and its present duties.”

All the civic leaders of Chicago—fifty organizations represented, led by the Parent-Teachers Association—banded together as a Citizens' Save-Our-Schools Committee. In two weeks they secured 350,000 signatures to a petition asking the Board to rescind its action, held a thrilling mass meeting of 24,000 citizens in the Stadium and dozens of smaller meetings all over the city, and prepared and published unanswerable facts and arguments. Notable among these last was Dr. Judd's proof that the deficit for 1933, which the Board gave as reason for its action, was a myth. Yet so strongly entrenched was the political machine, of which the Board members were but pawns, that they did not even trouble to answer or try to justify their action. Since then, they have on various pretexts withdrawn most of their minor changes; but the major damage still stands unrepaired. The Citizens' S.O.S. (“Save Our Schools”) Committee is still fighting with amazing vigor, through weekly releases of damaging facts to local newspapers, an active speakers' bureau, and ward organizations to fight those politicians who are avowed enemies of public education.

Now, against this background, remember that Crane Junior College has been through a series of crises since its consolidation of the post-graduate work of several high schools to become *the City College*. It grew too fast for its plant and equipment and was dropped from the North Central Association rolls.

It was reorganized on genuine college lines, and accredited again, deservedly, because it held to its standards and refused special privilege to the many who sought it. It was declared illegal, or at least extra-legal, in June 1931; but was legalized by a bill passed in the special session of the legislature in the fall. That crisis was hardly passed when the Board considered dropping the College as an economy measure, and only after long discussion retained it with a reduced budget. In the summer of 1932 they decided to charge tuition with the opening of the fall term—and with our students, 85 per cent of whom have parents who are workers or unemployed, that meant that not one in four could continue in school. Some of the leading students organized the opposition on the democratic principle of equality of opportunity, and won a stubborn fight. On the Wednesday before school opened in September 1932 the Board voted, "No tuition is legally permitted."

During the fall of 1932 the Student Committee on Education was organized. This was its platform:

Our purpose is to rouse all Chicago to the need of public support for secondary and higher education. We plan to organize all students of our city high schools and colleges to spread, as widely as possible, illuminating facts about secondary and higher education and the present attack on it. We plan no demonstrations; and we will verify all facts before using them.

It carried out its promises. It has been not only a powerful agent in the fight for educational opportunity but also a splendid influence in the lives and growth of these young people themselves.

When Mayor Kelly made his first appointments to the Board in May 1933, he was quoted as saying that Crane College must be closed. A storm of letters and calls of protest followed from every side of the city. At our request a committee of prominent citizens called upon him to learn his real purpose and to try to change it if it were hostile. That group, with some later additions, has become a permanent Advisory Committee for the City College. We are very proud of its membership. Hear this roll of honor: Jane Adams; Robert Clements, President of the Church Federation; Rabbis Louis Mann and Solomon Goldman; Rev. John Thompson, of the First Methodist Temple; Mrs. Samuel Lawton, Chairman of the Chicago Association for Child Study and Parent Education; Charles H. Judd; Fred Atkins Moore, President of the Adult Education Council; John Fitzpatrick, President of the Chicago Federation of Labor; Victor Olander, Secretary of the Illinois Federation of Labor; James Mullenbach, arbitrator for Hart Schaffner and Marx and federal co-ordinator; Deans Clarke and Chamberlain of DePaul and Loyola Universities; Judge John McGoorty; and Colonel James White, of the American Legion.

We believed that the campaign of May 1933 had left us safe at last, and scattered for the summer with that conviction. But most of the Student Committee and of the Crane faculty came back after the explosion of July 12, and took a large part in the fight which began at once and still goes on. Living or dead, the College has "sold itself" even to those citizens of Chicago

who had not known of its work until it was closed.

What is the situation now? Our faculty of 145 are scattered among twenty high schools, but get together from time to time to eat and gossip and talk business. Our efforts are directed by and focused in a Steering Committee of eleven. The Citizens' Advisory Committee has conferred with the Mayor and the President of the Board, and its individual members are working below the surface. Superintendent Bogan has recommended with his 1934 budget the restoration of the City College. The Steering Committee of the faculty has kept up a steady educational campaign with clubs, Church Federation, Federation of Labor, Citizens' S.O.S. Committees, etc., first answering the Board's misstatements, and then giving the constructive arguments and plans for a city junior college.

It has been clear from the beginning, of course, that the Board of Education was moved not by educational values but by political expediency, or rather, in its case, by political orders. We have not neglected, therefore, to show every possible person connected with the running of our fair city the value of the college in votes and good will! Elections are a year off, but machine politicians have their ears to the ground. We think it is not a bad thing, as long as no bargains or threats are involved, that every ward committeeman and alderman now knows about the City College and what it means to Chicago.

By April 1 the budget must be passed. If the state legislature empowers *any* extension of school revenue, a City College is possible for Chicago in September. If the legis-

lature does not so provide, it is more than probable that the whole school system will join the City College in temporary extinction.¹

The reaction of educational leaders in Chicago is well shown by two vigorous editorials by President Robert M. Hutchins, of the University of Chicago, in the *Chicago Herald and Examiner*. These are worth quoting in full:

WHO ORDERED CUTS IN SCHOOLS?

(Sunday, July 16, 1933)

We have a Century of Progress on the lake front. The Board of Education has initiated a century of reaction in the schools. They have denied the young people of Chicago, who need them most, educational opportunities that are more necessary than ever before. Every step they have taken is a backward step. They have damaged the school system so that it will take years to build it up again. They have damaged the city now and in the future. They have betrayed the children of Chicago. Who are these people? They are dummies in every sense of the word. They have no will of their own and they are utterly ignorant of educational problems. But stupidity cannot be the sole explanation of their behavior. Their conduct has been so extraordinary that it is impossible to believe they have acted in good faith. They have not been making an honest effort to save money. The mayor told them

¹ On March 26, 1934, the Board of Education, at the express wish of Mayor Kelly, voted to re-open not one but three junior colleges, one on each side of the city. The announced plans leave some doubt whether these will be accredited standard colleges or lecture centers for adult education. In either case, junior college education has once more been recognized in the educational budget of Chicago. Details have not yet been worked out.—J. L. H.

what to do. We do not know who told the mayor what to tell them; certainly it was not the people who have the interest of the children of Chicago or the city of Chicago at heart.

We know that the board was not making an honest effort to save money, because it flouted the superintendent and ignored the other experts who would have been glad to advise it. Its action can only be interpreted as the first step in a program of limiting the educational opportunities of the common people to the grades; the next move will be to charge tuition fees in the high schools.

We know that the board was not making an honest effort to save money, because it cut the services that are most necessary and valuable and made ridiculously small reductions in non-educational expenses. If their action had been based on the need for money and they had been trying to obtain as good a system as possible for less money, they would have struggled to the last to preserve what they have destroyed and would have tried to squeeze the water out of their non-educational expenditures.

We know that the board was not making an intelligent effort to save money.

Every municipality has had to economize. No one of them has done what this Board of Education has done. No one of them has deprived its children of the benefits this board has taken away from ours.

The basis for this action, therefore, is not economy. It is not an honest and intelligent desire to meet the financial emergency in the best way possible. The basis of this action is either a complete misunderstanding of the purpose of public education or a selfish determination that its purpose shall not be fulfilled, or an ignorant belief that a system that has been wrecked can still function.

The fact is, as I shall show in my next article, that the board has cut out

of the system those elements which it needs most at the present moment. The board ignored completely the effect on education of current economic and social conditions. The economic and social condition of Chicago will be worse for twenty-five years because of what this Board of Education has done.

DRIVE THE SCHOOL BOARD OUT!

(Sunday, July 17, 1933)

The school board has manifested its ignorance of education by cutting out of the school system, in the name of economy, those elements which the community can least afford to lose. Some of these actions will cost the board more money rather than less. All of them are extravagant and wasteful in the sense that they will produce a poor school system which, in turn, will produce a less intelligent population. We shall be burdened for years to come with the social and economic consequences of this program. And then we are told this is economy.

The public schools have the task of making boys and girls useful citizens. This requires the schools to give them some help and preparation for earning a living. It requires them to develop people whose physical condition will not make them a burden to the community. Since their product is to be citizens and not machines, the schools must give their pupils some appreciation of music and the arts. And, in addition, the schools have another function which has been forced upon them by society: they must accommodate our young people until industry will absorb them.

The frill in education is apparently something which is good for the child and good for the community but which the schools did not do fifty years ago; and an inspection of this list of the school's present responsibilities will show why the school must

now do many things it was not expected to do fifty years ago.

Industry and the family have renounced their responsibilities, one by one, and have thrown them upon the schools. Because of the depression, industry and the family are less able than ever to carry these responsibilities. The Board of Education now proposes to make it impossible for the schools to carry them. And if there ever was a time when these tasks had to be performed, it is the present moment.

With ten million people out of work, we cannot look to the family to care for the health of children in accordance with even those minimum standards which the community needs for its own protection. It is a tragic joke to suggest that the family can now provide understanding of the arts. And what will industry do to accommodate our children through adolescence, and to train them to be self-supporting? If it cannot take care of the adults of the country, it clearly will not bother about the children.

A present movement to abolish child labor, praiseworthy as it is, means that the schools must take up the burden industry has laid down; the schools must find a place for our young people until industry can find a place for them.

No one can study the economic and social conditions of the present day without coming to the conclusion that, in the interest of the community, we must prolong and diversify educational opportunities supplied at public expense. Every European country, even in the midst of depression, has taken this course. It is the only course that can be taken by a nation that wishes to preserve itself from the consequences of stupidity, degeneracy, ignorance, and idleness. For a democracy to take another course is folly.

Many American municipalities, including the Chicago of an earlier day,

have realized the responsibilities of public education. There are a dozen or more municipal universities in this country. Cities that possess them do not think it would be economical to discontinue them.

There are about 200 public junior colleges in this country, most of them in the West and Middle West. The number is wholly inadequate and, where they do not exist, the high schools have had to organize make-shift classes for their graduates. This has been true in Chicago where Crane Junior College has been far too small to meet the needs.

Now that Crane Junior College is to be abolished, what shall we do with those who have been attending it and those who ought to attend it? It is suggested that they can be nicely accommodated in the colleges and universities. They can be if they can pay the tuition fees at Northwestern or Chicago, which they cannot do; or if they can afford to live away from home at Urbana, which they cannot do.

Since they cannot continue their education, they must be thrown upon an already overcrowded labor market, or they must be added to the ranks of the unemployed. And this is economy!

The abolition of Crane Junior College is the most serious of the crimes of the Board of Education. But all the rest of their actions reflect the same perverse misunderstanding of public education and its present duties.

The members of the board have confessed their incompetence to develop a school system worthy of Chicago. They are disqualified for further service. The people should drive them out of office.

A special "City College Committee" has been formed, with the speaker as chairman, to work for the re-establishment of Crane. The following dodger illustrates some of

the information which is being widely distributed among the influential, thinking people of the city.

WHAT HAS CRANE COLLEGE DONE FOR CHICAGO?

The junior college now is the equivalent of the high school fifty years ago: a necessary preparation for *active* participation in professions, business, social life, full citizenship.

Crane Junior College, in its 22 years, has given 25,000 young people fully credited college work. For many this was the beginning only; for many more this was the end of educational opportunity.

It has prepared several thousand for professional schools of law, medicine, dentistry, business administration, engineering, teaching.

Hundreds of its graduates, because of their good records, have been given whole or part scholarships by universities and professional schools.

Crane students in general have been welcomed in other schools and universities because of their willingness and ability to work. In competitive examinations they have without exception won more than their numerical share of awards.

Recent surveys of Crane students show about 60 per cent with foreign-born fathers and mothers, about 85 per cent whose parents were workers or unemployed. Since the closing of the College, the best figures obtainable show roughly 75 per cent of the 3,500 students out of school and out of work.

Surely 25,000 young citizens better prepared for prosperity, depression, crisis, or progress have been a stabilizing influence in Chicago. They represent Chicago's investment, never more than one-fifth of a cent in the annual tax dollar.

Can a City College Be Continued? Yes:
The investment is not large: *a fifth of a cent in the tax dollar.*

- (a) The equipment exists, but will be largely wasted if the college remains closed.
- (b) Its picked faculty are on the Board's pay-roll now. Their places in high schools will be acceptably filled at lower salaries by those now being re-engaged.
- (c) A usable building can be vacated with little redistricting or crowding.
- (d) By running from 8:00 A.M. to 9:30 P.M., a building intended for 1,500 high-school pupils can be made to serve 3,500 college students, at a cost per year of less than \$140 per student.
- (e) The total cost of the college under these conditions would be between \$450,000 and \$500,000, or *one per cent* of the whole school budget. But this is *not new or additional* cost to the Board. The only addition to the present school budget would be the salaries of 145 teachers, at the lower end of the salary scale, whom the Board is now planning to re-engage as rapidly as possible.

Note that this college will take students from every section of the city, but not from out of town; will not take flunkers from other colleges; will not keep at taxpayers' expense those who prove themselves unfitted for college; will provide, if past experience holds true, for 85 per cent of those who apply for admission; and its credits will be accepted at any university or professional school. All of this was, of course, true of Crane College. It would *not* be true, at least as to credits, of "postgraduate courses" in scattered high schools.

Reorganization at the University of Chicago

CHAUNCEY S. BOUCHER*

Permit me to state at once my conviction that the administrative organization of any educational institution (including all administrative officers, regulations, policies, and practices) has valid reason for existence only to the extent that it encourages and facilitates the attainment of desired educational objectives; and whenever the administrative organization is found to impede the attainment of these objectives it should be altered accordingly or perhaps even be abolished to make way for one that will serve the ends desired. I hold this view because I have known more than one administrator who seemed to comport himself as though the only rôle appropriate for a student or faculty member was that of a perfectly articulated cog in his administrative machine.

Change in the organization of administration or change of the curriculum merely for the sake of change is quack doctoring. Administrative reorganization is legitimately called for only as a needed accompaniment of a change, usually professedly directed at improvement, of educational objectives, which improvement, in turn, is usually attempted through a change in curriculum organization. Though administrative reorganization may be the first step actually taken in the launching of a new

educational policy and program previously agreed upon, the determination of the extent and character of the administrative reorganization should come as the last step in the design of the new educational plan. The logical and, it seems to me, the only defensible sequence in the development of a new educational program in any institution is the following: (1) agreement should be reached on a restatement of educational objectives; (2) the curriculum best adapted to the attainment of these objectives should be designed; (3) full consideration should be given to a selection of the seemingly best combination of methods of instruction to be used in the attempt to attain the objectives; (4) full consideration should be given to a selection of the seemingly best combination of methods to be used in the attempt to measure the attainment of the objectives; (5) lastly, the administrative organization should be designed solely with a view to maximum service to the attainment of the desired educational objectives by the two parties most vitally concerned, students and faculty, since the major educational purpose of the faculty is to assist the students, and the sole purpose of administration is to serve both students and faculty.

HISTORICAL RÉSUMÉ

During a considerable period, while the University of Chicago was winning pre-eminence in graduate

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education and research, the College was grossly neglected; even worse, the College came to be regarded by some members of the family as an unwanted, ill-begotten brat, that should be disinherited. Nearly all finally agreed that we had reached a situation that necessitated a decision either to abandon the College or to develop it to a position of strength in its field comparable to that of our graduate schools in their fields.

Approximately ten years ago President Burton announced that our objective would be to develop the best possible college. A proposal was then put before the faculty to segregate the junior college completely from the other schools of the University, placing it across the Midway with its own faculty, budget, dean, buildings, and equipment. The debate over this issue resulted in a stalemate that was generally interpreted as defeat of the proposal. Under President Mason it was decided that the College should be not merely of but effectively in the University.

In the meantime, a campaign was launched to study carefully every phase of life and work in the College with a view to the development of a constructive program. The most significant early step was the development of a greatly improved student guidance program. This in turn brought clearly to light the need of fundamental curriculum revisions and the need of improvement in the quality of instruction, which in turn showed the need of improvement in college faculty personnel and the devotion of serious attention to instructional methods. As this study progressed many of us became convinced that there was

also need for a radical change in the method of measuring the student's progress, away from the course-credit and course-marking system, that would change fundamentally the relationship between student and instructor, that would improve student motivation, and that would make provision for the great differences in capacity and in the effectiveness of applying capacity among students.

When Mr. Hutchins became president of the University, this study of the college program had been carried to the point that the time was ripe for the proposal of appropriate administrative changes. Thanks to his vigorous and constructive leadership, our new divisional organization was framed in the manner best suited to the attainment of our objectives at the junior college level and for the appropriate adaptation of some of the basic principles of the College plan to the upper-divisional and professional school programs.

THE NEW PLAN ORGANIZED

After swinging from one extreme to another—from the rigidly fixed curriculum to the wide-open elective system—the better colleges endeavored to strike a happy medium. In recent years it has been common practice to prescribe a number of group requirements—English, foreign language, mathematics, natural science, and social science—designed to furnish a proper balance in an introduction to general education to be completed by the end of the second year, and a sequence or concentration requirement for the last two years.

The introduction of group and concentration requirements was a

step taken in good faith to infuse at least a modicum of order and balance into a student's total college program without interfering seriously with the individualization of student programs. After careful study of the situation over a period of several years we concluded, at the University of Chicago, that group requirements, stated merely in terms of a course or two in each of a few large groups of departments, achieved too little as a guaranty of an appropriate breadth of educational contact and experience, with departmental introductory courses what they were.

In what may be termed the "chaotic" period, when the wide-open elective system ran riotously into utter confusion—a period which lasted in most institutions until ten or less than ten years ago, and still persists in some institutions—most departmental introductory courses were designed with the sole purpose of preparing students for advanced courses in the respective departments. Most departments seemed to think only in terms of specialization, and seemed to be interested not at all in students who wanted and needed an introduction to several departmental fields of thought as essential parts of a general education.

One of the most significant products of the study recently devoted to educational objectives and the curriculum has been the orientation or survey course, designed to orient the student in a large field of thought which runs through and across many of the artificial boundary lines established by the growth of the numerous departmental compartments that universities have developed and formalized. In our

early experimentation at the University of Chicago our most successful course of the survey type was one covering the whole field of the physical and biological sciences in two quarters. This course was given for eight years, a period long enough for a careful study of results. Again and again, seniors, who had taken the course in their freshman year, testified that, in looking back over their educational careers, they were clearly convinced that the most stimulating and most profitable intellectual experience ever afforded them was this survey course in the sciences, entitled "The Nature of the World and of Man." For a student who wanted no more than an introduction to the field of science, this course seemed to be more profitable than any one of the old-style departmental introductory courses; and for the student who expected to specialize in one of the sciences, this course showed him the true position of his specialty in a larger field of thought, together with the contributing values of each specialized department for the others in the larger field of thought.

Our success with this science survey course furnished one of the most significant considerations that led us to frame and adopt the imposing program of four introductory general courses in as many large fields of thought that we now offer. It is not likely that we could have brought ourselves to face the heroic efforts necessary to design and administer this program, with any assurance of success, had it not been for what we had learned from our previous experience in the field of the sciences regarding the possibilities and values of such courses.

We now offer for freshmen and

sophomores an introductory general course through an entire academic year in each of four fields: the biological sciences, the humanities, the physical sciences, and the social sciences. Though no student is required to take any of these courses, each student is required to pass a comprehensive examination in each of the four fields set to demand the attainment of the minimum essentials of factual information and an introduction to the methods of thought and work such as may be expected of a student who has pursued through an academic year a general course at the junior college level.

These four examinations constitute the major part of our definition of the minimum essentials of a general education. In addition, we require that a student shall be able to express himself with clarity and accuracy in written English, and shall have a mastery of a foreign language at the level of attainment expected of a student who offers two acceptable entrance units in a foreign language, and a mastery of mathematics at the level of attainment expected of a student who offers two acceptable entrance units in mathematics.

All of our students, who either end their institutional education upon the completion of the junior college requirements or who continue in one of our four upper divisions, or in a professional school, have in common this much educational experience and mastery: an introduction to each of four large fields of thought, an essential minimum of proficiency in English usage, and a respectable minimum training in a foreign language and in mathematics.

MASTERY IN TWO FIELDS

In order that each student may have at least a modicum of experience in depth of penetration in addition to what we believe to be an appropriate breadth of educational contact, we prescribe that each student shall demonstrate by appropriate examinations that he has attained such mastery of the subject-matter, techniques, skills, habits of thought, and methods of work in any two of the four fields as may be expected of a student who has pursued through an academic year in each of two of the four fields of a second-year general course or a year course in a departmental subject or an approved sequence of three quarter-courses in two or three subjects within the general field. As aids to the attainment of the mastery thus called for, we offer a variety of what we call "sequence" courses and a variety of "sequence" examinations from which the student may choose two, one in each of two of the four large divisional fields.

Since all of our students offer the same two units of mathematics and take the same examinations in the four large fields of thought and in English usage, and since individualization is provided only in the foreign-language requirement and in the two "sequence" examinations, it would seem that we have taken a rather vigorous step in the direction of return to the idea of the old fixed curriculum. In a sense this is true, but there is a vast difference between the fixed elements in our curriculum and the old fixed curriculum, and there are great differences between the reasons for their respective adoptions.

Though we have returned to the old plan of the fixed curriculum, though of a distinctly new type, to the extent of two-thirds of our junior college program, and to this extent have abandoned the individualization of student programs, we have made complete provision for individualization in regard to the attainments and the capacity of each student. Since we require the demonstration of achievement in both prescribed and elective fields rather than course credits, each student is saved from what for him may be boring repetition or routine, perfunctory, lock-step procedure. Each student can capitalize to the fullest his past achievements and his present capacity for achievement; he may save time in the fulfilment of the junior college requirements in exact conformity with his degree of superiority over the average student in regard to past achievements and present capacity for achievement. A student may present himself for any examination at any regular examination period—in June, September, or December—whether he has participated in all or any part or none of the class work of any course.

We have found that some students either are prepared or can prepare themselves without instructional assistance for one or more examinations; others need only part of the regular work of a given course; while the majority need all of the class work offered as an aid to the attainment of the knowledge and intellectual power necessary to pass each prescribed and each elective examination. Each student is advised according to his needs in order that he may always be engaged in work that

challenges his interest and his capacity. The requirements are set to demand of the average student two years for the Junior College Certificate. The number of students who need less than two years to meet the requirements is balanced by those who need more than two years.

We believe that this type of individualization of student programs is the one most needed to bring home to each student the true meaning and significance of the educational process for him individually. It changes almost completely the motivation of a majority of the students, and it changes, very significantly and quite wholesomely, the relationships between student and instructor. The student soon realizes, in spite of his past experience to the contrary, that the instructor is not his enemy, with whip in hand, whom he must beat out of a credit, but is his team mate, his best source of assistance in the attainment of as much as is possible in a given field of thought in the time at their disposal.

THE DIVISIONAL PLAN

Thus, having agreed that our major educational objective for the junior college should be general education, with reasonable provision for the pursuit of special interests, we decided that there was need for fundamental revision both of the curriculum and of the method of measuring the progress of the student as shown through his demonstration of attainments worthy of a Junior College Certificate. The administrative reorganization then suggested by President Hutchins as the one best adapted to the achievement of our newly defined educational purposes was

adopted enthusiastically by the University Senate in October 1930.

The administrative plan adopted created five divisions in Arts, Literature, and Science: the College (a lower division for the junior college program) and four upper divisions (the Biological Sciences, the Humanities, the Physical Sciences, and the Social Sciences) for the senior college and graduate programs. Each of the five divisions has a faculty, a dean, and a budget. The objects of the reorganization were stated as follows:

to improve administration by placing greater responsibility on officers who are familiar with the work of their respective divisions, to reduce the number of independent budgets presented to and administered by the President's Office, to promote co-operation in research, to co-ordinate teaching, and to open the way to experiments in general higher education.

Under this organization each division is presided over by a dean who receives the budgets of the departments in his division and co-ordinates them into a divisional budget which then is transmitted to the President's Office. The budget of the College consists of that portion of the salaries of members of the faculty that represent the share of their time and attention that is devoted to college work. Each member of the college faculty is a member of some other division, whether he devotes full or part time to the college program. Appointments receive the approval of the appropriate divisional dean or deans before going to the President.

The function of the College is to do the work of the University in general higher education. A student

passes from it on completing his general higher education and is admitted to one of the other divisions on presenting evidence of his ability to do advanced work. Specialized study in Arts, Literature, and Science, whether professional or non-professional, is carried on in the upper divisions. Though the College is a separate administrative unit with all the freedom needed, it is so closely knit into the upper divisions that it has at its command all of the educational resources of the entire University. Many departmental chairmen and professors who are scholars of international renown are interested participants in College instruction. This is one of the notable advantages of a college in a great university—a strong teaching organization set against a research background. Teaching is the passing-on of truth and the tested methods of search for truth; research is finding new truth and new methods of finding truth which will later be passed on and applied in life. The two go naturally together and they should be done best, though they are not always in fact, where they are done together—in a university which supports both teaching and research, at both the undergraduate and graduate levels.

THE DEAN OF STUDENTS

In December 1930, upon recommendation of the President, the Senate authorized the appointment of a new administrative officer, co-ordinate in rank with the divisional deans, to be known as Dean of Students and University Examiner, to co-ordinate all of the University's relations with students, including admissions, recording and report-

ing, health service, the administration of entrance, placement, and comprehensive examinations, the educational and social supervision of residence halls and clubhouses, the direction of social affairs, vocational guidance and placement, student aid, the administration of fellowships and scholarships, and student advisory service in Arts, Literature, and Science. Upon request these functions may be extended to the professional schools.

The report of a special committee on the constitution of a Board of Examiners was adopted by the Senate in March 1931 as follows:

1. The creation of a Board of Examinations to consist of three members appointed by the President; a representative from each of the divisions, to be chosen as herein-after provided; a representative from each professional school using comprehensive examinations; and the University Examiner, chairman ex officio.
2. The appointment by the Dean of each Division and by the Dean of the College of divisional committees on examinations. The chairmen of these committees should serve ex officio on the Board of Examinations provided for in paragraph 1.
3. The three members of the Board of Examinations to be appointed by the President should be selected primarily because of their competence in examination methods.
4. The Board of Examinations would be responsible for: (a) determination of policies to be used in the formulation and administration of comprehensive examinations. (Comprehensive examinations should not be interpreted as being restricted to any particular type of examination. In the opinion of this committee they should include any kind of test, investigation, problem, assign-

ment or creative work by which the abilities, achievements, or performance of students may be measured. The examination techniques designed to achieve these ends with the greatest degree of reliability should be the subject of study by the faculty and the Board of Examinations.) (b) The recommendation for appointment of a Chief Examiner to be in charge of preparing and conducting such comprehensive examinations as are desired by the several faculties. The Chief Examiner would be responsible for recommending the appointment of his technical staff and office force.

5. The Board of Examinations, after consultation with the Deans of the divisions and the heads of the departments concerned should recommend the appointment of members of the instructional staff who have shown interest and competence in the development of examinations to work with the Chief Examiner in the preparation of examinations. Persons chosen for this work should be freed from such portion of their regular responsibilities as may be necessary.
6. The divisional committees on examinations should be called into council when examinations which concern their respective divisions are being planned, they should report to the Board of Examinations regarding the adequacy of the examinations as a test of the objectives and the methods of instruction of their divisions, and such additional information as may be of assistance to the Board in the development of an adequate program of examinations.

SELECTION OF FACULTY

Upon suggestion of President Hutchins and with the recommendation of the Senate Committee on University Policy, the Senate

adopted the following in November 1932:

That the requirement that all members of the College faculty be members of departments and divisional faculties be abrogated, and that the Dean of the College be empowered, in consultation with the chairmen of the departments and deans of the divisions concerned, to recommend to the President members of the College faculty who may or may not have departmental or divisional affiliations. It is understood that members of the faculties of other divisions will continue to teach in the College by arrangement between the Dean of the College and the dean of the division concerned. For the guidance of the Dean it is considered desirable that a large proportion of the College faculty be members of departments and divisional faculties.

The attention of the Senate was called to the action of the Senate, in the preceding March, providing that appointments to departments are made only on approval of the department concerned. No College faculty member has as yet been appointed who does not have departmental affiliation, but such an appointment can and will be made whenever the need arises.

FOUR-YEAR UNIT

At the same time that this provision regarding appointments was adopted, it was enacted, on recommendation by President Hutchins, "That the work of the College in general education be extended by removing the last two years of the University High School from the jurisdiction of the Division of the Social Sciences and the School and Department of Education and incorporating them in the College program." The considerations that led

to this proposal for a new college administrative and educational unit in the University of Chicago, including the last two years of high school and the first two years of college, were of two categories: (1) those considerations growing out of the present conditions and trends in the field of secondary education throughout the country; and (2) those considerations growing out of our experience in the design and administration of our new college (junior college) plan.

We have learned increasingly in recent years that the problems of senior high school and junior college educators are at many points common problems that cannot be solved when the two institutional staffs are separated both institutionally and in the prevailing organization of regional and national associations, in which each group is too much inclined to pass the buck to the other group, along with some uncomplimentary epithets.

Under our 1931 administrative reorganization in the University of Chicago, we limited the term "College" to a new junior college program, and we merged the senior college program with the programs of the graduate and professional schools, calling students above the junior college level divisional or professional-school students. We thus acted upon our belief that four years of the old type of college program is an unnecessary and wasteful preliminary to "higher" education of the tone and tempo of graduate and professional schools requiring the Bachelor's degree for admission; and that a new junior college program, properly designed and effectively administered, can serve more adequately the needs of

students in regard to general education and can bridge more successfully the gap between "secondary" (high-school) and truly "higher" (university) education.

As pointed out above, the Senate of the University some years ago refused to adopt a proposal to segregate our junior college because it was maintained, wisely and successfully, that our junior college must be not only of but in the University, if we were to make any significant contribution in the junior college field. Our new junior college program has proved the wisdom of this decision. Some of the most significant contributions in our present program could not possibly have been made in a segregated junior college, in which the indispensable assistance of members of our divisional faculties would not have been available.

The college period is a transition period between secondary and higher education—a transition that can be made instantly by only a few students, even in an institution with an admission system more highly selective than ours. If the college period is merely a continuation of high-school performance, it fails; or, if it is a truly university performance, it is likely to fail. We have endeavored to design our college program so as to bridge the gap successfully. Instead of permitting the tone and tempo of high-school performance to reach up and control the junior college program, we have insisted that the tone and tempo of university performance must be pushed down into the junior college program, there to meet the high-school influence, to remold it, and to dominate it, as the student progresses in his appreciation

of what his status must be, as a scholar, if he is to enter one of the upper divisions or professional schools.

It seemed to many of us that, in view of the extent to which we had shown that this influence from above can be made to dominate the junior college area, the time had come to carry the experiment down two years lower, into the senior high-school area, and thus to begin the gap-bridging period between secondary and higher education two years earlier. This, distinctly, was the proposal: to push the college influence, through control, down into the high-school area—and not to push the high-school influence up into the college area.

We believed that, if we could succeed in this experiment, the pattern might be set for an institutional organization more satisfactory educationally and administratively than the 6-3-3-2 pattern. Success of the proposed plan would seem to point to a 6-(3 or 4)-(3 or 4) arrangement, with the student spending six years in elementary school, three or four years (as he may need or desire) in high school, and three or four years (as he may need or desire) in college, at which time his institutional training, designed primarily to serve his needs in regard to general education, would be completed. He could then, with adequate preparation, proceed to specialized work in a real university program in arts, literature, science, or in professional education, if he so desired.

Under the new legislation, members of the high-school faculty who teach the program of the last two years of high school are members of the college faculty, just as any

university faculty member who teaches in the program of the college (junior college) is a member of the college faculty. The College Curriculum Committee now includes within its personnel and jurisdiction instructional staff members and the program of studies of the last two years of high school and the first two years of college. For the first time in the history of the institution, staff members of what in the past were regarded and handled as two distinct areas but are now regarded and dealt with as a single area, are working earnestly and continuously on the solution of common problems. Henceforth, the program of the last two years of high school and the first two years of college will be a co-operative enterprise of a single faculty.

In the faculty legislation setting up the new four-year unit, provision was made for the enrollment of qualified high-school seniors in college courses with college students, and not in special sections. Pupils who carry college courses successfully in the senior year in high school receive credit toward graduation from high school, and at the same time, by passing the comprehensive examinations required in the College, receive credit toward the College Certificate. Thus, in the first year of operation of the plan, it is possible for a qualified student to substitute a college program for the last year of the high-school program, and to earn the Junior College Certificate in one additional year or less. This experiment is being conducted with the consent of the North Central Association.

It is contemplated that, as soon as satisfactory examinations can be

framed, the progress of the high-school student toward the attainment of a high-school diploma will be measured in terms of comprehensive achievement examinations, rather than in terms of course credit just as is now the practice in measuring the progress of a college student toward the attainment of the Junior College Certificate.

For the present, the last two years of the high school are called, as heretofore, the junior and senior years of the high school. Classes continue to meet in the same buildings and under the same teachers as formerly. The present legislation, however, gives complete freedom for the placing of student and faculty personnel in the program of the last two years of high school and the first two years of college wherever they should be placed for the best possible attainment of desired educational objectives.

For several years we have had approximately 100 high-school seniors and 750 college freshmen, approximately 50 of the latter being graduates of our own high school. Whether we shall, either in the near or the distant future, have a student body of significant size continuing through our new three- or four-year college program, and designated as freshmen, sophomores, juniors, and seniors, remains to be seen. In any event, we now have a most favorable organization for the development of a thoroughly integrated program for a homogeneous student body in this senior high school and junior college area.

Many phases of our new college plan in operation have been discussed by the present writer in other papers, reprints of which may be had upon request.

Reorganization at the University of Minnesota

MALCOLM S. MACLEAN*

I deeply regret my inability to be with you today since I should thoroughly enjoy being thus sandwiched in between Dean Boucher and Professor Yeager and carrying on a friendly three-cornered battle with them on our mutual problem of the reorganization of the lower division within a university. Such a thrashing out among us would sharpen issues, clarify objectives, and picture forth processes as nothing else might do. I shall, however, present *in absentia* Minnesota's method of attack, in part by comparison with Indiana and Chicago, and leave to my colleagues Boucher and Yeager my silent fortresses, bastions, and entrenchments for them to bombard to bits if they like.

THE PROBLEM TO BE SOLVED

Chicago, Indiana, and Minnesota are unquestionably in accord in the approach to the problem and the reasons for there being a problem to solve. We recognize, I believe, the profound social changes in the United States that, in this century, have created among many others such an astonishing phenomenon as 519 junior colleges. We know that birth control, allied with the assault of medical science on the diseases that used to cut down children by the thousands, has shifted the population in a little over one

hundred years to three times as many grown-ups now to every thousand children and youth. We are aware that these things combined with technological advance have, by cutting jobs, thrown adults into competition with youth for even the simplest occupations. We see that out of these great accelerating social forces have issued the compulsory education laws and the anti-child labor laws, because adults will snatch jobs, when there are not enough to go around, away from youngsters with short shrift no matter how they may rationalize the process and gloss it over in terms of sentimental humanitarianism. We see that the increase in high-school and college enrollments is one focal point of the whole American picture; the Civilian Conservation Corps, CWA, and concentration camps for hitch-hikers and bums being other focal points. We can foresee also, in my judgment, a time in the not distant future when the adult-youth conflict will become so sharp that the elders will have to refuse all employment to the younger generation until the age of twenty-five or thereabouts or the elders themselves will have to retire at forty to make room. To these potent and imminent problems there seem to be but three answers. One, another great war to blot out a quarter of our population, both soldier and noncombatant, to temporarily stimulate production and thus open for a while enough jobs for everyone, but with

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the surety of deeper depression and disaster in the end. Two, another grim alternative of developing a sinister youth movement such as has led to certain intolerable phases of Nazism in Germany and the more recent rioting in Paris; an exploitation of youth far worse, I think, than sweatshop or chain assembly in factories. Three, more education at higher levels for a larger portion of youth than has ever before dreamed of carrying study into early manhood and womanhood combined with a governmental expansion of conservation corps, civil and public works projects for youngsters lacking the ability, interest, or training to profit by such study.

BREED MORE JUNIOR COLLEGES

In the light of these things it seems increasingly important that we breed more junior colleges, and that we reorganize lower divisions in universities to take care of increasing numbers. It appears wise that we experiment now as, I hear, some junior colleges are experimenting in order that we may have our forces ready, our machinery freed of mechanical "bugs" and ready when the full load is upon us. The three universities on this program are thus experimenting.

As I observe it, Chicago has taken the most direct method of attack. The whole lower division is reorganized on new lines into a single unit accepting all university freshmen and sophomores. Moreover, the faculty have done a thorough and challenging job of reorganization into four major courses for the two years. Indiana has, I understand, done little more than to permit some students to vary from the

standard patterns of majors, minors, and sequences. It is perhaps starting in easily, as Dean Boucher and I could not do, and planning more radical changes later. Minnesota takes a very different attack from either of these, having set up a separate unit right alongside the lower divisions of the other colleges of the university.

In the first year this organization at Minnesota was called the Junior College of the University. We were forced to change the name, however, because those who did not know anything about junior colleges thought the new unit was a "prep" school, a hybrid or illegitimate rival of the long-established University High School. Those who knew, or thought they knew, about junior colleges conceived that we would be duplicating the first two years of the lower division of the College of Science, Literature, and Arts and wanted to know why in Tunket this should be. Some equanimity has now been achieved by renaming the new unit the General College of the University and reassigning Junior College to the Lower Division of the Arts College.

REASONS FOR THE GENERAL COLLEGE

The General College was launched for a number of fundamental reasons. In the University as a whole, student mortality was either much too high or not high enough depending on how we looked at our objectives. If the purpose of the university be to turn out only leaders of society, professionals, and researchers of the first rank then the mortality was much too low since it could be observed with half an eye that many graduates are mediocre, and that, even if they were

not, there was and is a terrifying overproduction in all fields of allegedly trained people. If, on the other hand, our objective be to do as good an educational job as can be done for all who come to us, then the mortality was far too high. Taking the latter as our objective, we set out definitely to cut mortality, not that we might have more students, but that our losses might be rational ones. By that I mean we must know that a student leaving has either won all the profit he could, or is voluntarily withdrawing because of finances or because of more profit to be won in fields outside. We had been considering our losses as the waste products of higher education. We now try to determine if they be not the raw materials of valuable by-products.

A further reason for organizing the General College and these other lower divisions is the overspecialization we have built up in education. Some liken the standard college structure to a series of pneumatic tubes. Before and during the pressures of unemployment it was assumed, by some is still assumed, that a student may pop or be popped into one end of a tube labeled "sequence of courses leading to the Bachelor's degree in business," and, if he does not get by-passed into the discard pile, pop or be popped out into a job. Others change the metaphor. They liken it to a network of railroads with a horrible confusion of locals and expresses, junctions and transfers, national routings, the chief function of which is to pile up mileage toward a single terminal, the Bachelor's degree, with such a concentration on getting somewhere that the student passen-

gers see little or nothing. They pass through dull swampland and cutover, smiling field and mountain canyon at the same speed and toward the same end. Such glimpses as they do get are fragmentary and unrelated, giving no sense of unity of terrain, of the flow of plain into mountain, or, to break it over into education, of the relationships of art and economics, of social problems and biology.

Now Chicago seems to me to have taken the old system and put through a merger, consolidating its spurs and branch lines in the College into four great divisions over which students must travel at variable pace. They may jog along on a local or take an express so long as they see the country fully, the difference between one student and another being the degree of concentration of attention and sharpness of eye. Indiana seems not to have made such consolidations but to have rather made it easier for the passengers to select out of their own interest and judgment which routes they will travel. Both, however, attempt to make it possible for the students at last to get a general education, the important sense of unified terrain, and an understanding of interrelations.

Minnesota, with the same objectives, has done another thing. It has built, in the General College, a whole new system. It is here that the differences between our experiment and the others begin to appear. Instead of Chicago's four major courses, we have twenty-four, all experimental, any one to be killed off if it does not prove its usefulness, to be merged with others if that seems wise. Others

still are in the stage of planning. I shall not describe here these courses. You may find fairly full descriptions in our bulletin. But I shall attempt to indicate how they are planned, organized, launched, and constantly rebuilt.

THE NEW CURRICULUM

Our first objective is to keep them general. We determined to give a sound, broad layman's view of a field of human knowledge and human activity, integrated in itself, and demonstrating its interrelations with other fields. That is hard to do. For example, the chief of the University Forestry Division launched for us a course in conservation of plant resources. The first time he gave it, he bogged down in the specialty of botanical analysis and found himself, after nearly half the quarter was over, ready to begin the course he had planned. This year the botanical specialty has been whipped back into its right proportion. However, the impact of the Agricultural Adjustment Act is forcing the course again to change. In part it is being reshaped in mid-career. In part, other changes for next year will await the turn of events, the development of agricultural affairs at Washington. So flexible are some of these courses, so subject to change, that it would be possible for a student to take them continuously from year to year with little duplication of anything but underlying principles. This very factor gives the student, we find, a sense of newness, adventure, exploration. It is at the price, of course, of tremendous effort on the part of us who teach them, but to us, it

brings the same sense of newness, adventure, and exploration.

Some of our critical colleagues deep in the drives of specialization challenge these courses. "What," they ask, "are your standards? Aren't your courses perhaps interesting but thin, skeletal, with no meat on the bones?"

Our answer is that of Professor Munro of the California Institute of Technology. There is or should be only one standard in all courses, general and special, of primary, secondary, or college grade. All courses must meet the one test. If they awaken interest and stimulate the students in the course to self-propelled exploration and study they are standard courses. If, on the other hand, they are merely so many credits to accrue, so much mileage to cover, scenery to observe and forget, they are not standard courses. If a course is thus standard there is no limit to its boundaries for the best of students; there is rich value in it for the humblest.

There is another angle to this, however, and in taking it we can see, perhaps, a reason for the Minnesota twenty-four courses instead of the Chicago four. Any analysis of individual students, as you know, will reveal them as being not of standard patterns all ready for the same things at the same time as, I fear, we have too often assumed them to be. Rather they show the infinite variability of human beings one from another and within themselves from one time to another. In the junior colleges and lower divisions we find them at all stages of growth from the veriest patterns of juvenile behavior, emotion, and attitude through all ranges and gradations

of adolescent reactions, to an occasional finely balanced, objective, adult adjustment. Because of these things plus hereditary and physical factors we find them also infinitely variable in their powers and capacities to absorb, in the force of their drives to learn, in their motives, and hence in their interests. Because of these factors we did not follow Chicago's lead, wanting to add even to their extraordinary flexibility.

TAILORED TO INDIVIDUAL NEEDS

In concrete terms we can at Minnesota, if in time we grow to wisdom enough, tailor a course in most instances to the individual student. He has, in the first place, free election among the battery of general courses. He is restricted only by his own limitations of time, outside work, aptitude, interest, and aims in the amount he may take either at the lower or upper limit. We have one girl, nursing a very sick mother, who escapes this duty for one three-hour course. We have had others do twenty-four hours of course work a week without faltering. We have some concentrating in allied fields of interest, others browsing widely to achieve background and to develop foci of interest. And we have further a wide range of the special courses in the other colleges to which we may, when there is need, permit entrance. Thus, one who comes to us keen to climb to the higher reaches of mathematics may do so in the Arts College department of specialty while he surveys social science or history, art or home management, government or technology, or all together with us. The special drive becomes a part of his general

training; thus, also, with those who have interest and talent in painting or sculpture, music or dress design, physics or wood and metal work, home economics or Latin. There is one further difference, as I see it, between the Chicago course organization and our own. Theirs tends in most fields to make the chronological, classical approach to a subject, to attack it by beginning with roots in past ages and progressing to branches in the present. Ours reverses this process. We are experimenting to see if opening each course on the present will not so increase desire, strengthen motivation to learn, that a student will, in his self-propulsion, work his way back to the past. Thus our course in Appreciation of the Arts starts with the motion picture, with the liveliest of art interests of most students. In this field we have a rich opportunity for survey, since the whole art has grown up within our own lifetime, the earliest historical examples of films are available, and the latest examples are paraded constantly before the students' eyes. But since the motion picture has its roots in the drama, the transition to the theater is easy. Music is allied and integral and so are the graphic arts, emerging from a consideration of both photography and stage design.

CONSTRUCTION OF EXAMINATIONS

While differing from Chicago in the number of courses and in the approach to them, we agree fully with Dean Boucher and his staff in a number of other fundamentals. Like Chicago we have a Board of Examiners made up of one branch of our University Committee on Educational Research. Dean Hag-

gerty and I are consultants to four responsible research professors, who divide our battery of courses among them roughly into the four fields as at Chicago. These four are assisted by graduate students who attend all lectures, examine all syllabi and texts, and read as much recommended reading as is possible. The four are assisted also by a large corps of graduates and undergraduates who work on special phases of the examination problem.

Our principal objective is the building of true comprehensives although we give course quizzes and examinations on the demand of students. The latter we use chiefly to furnish us with experimental data. To illustrate the building of such a comprehensive let us follow the process through in one of the nine we at present offer. Let us take economics.

Our first move is to have the assistants list and define the entire special vocabulary of the field as it appears in the lectures in the course called "Our Economic Life," in the syllabus, texts, and recommended readings. To this is added by the assistants in other courses such portions of the economic vocabulary as may appear in these, as, for example, when the lecturer in technology discusses distribution, transportation, and the effects of the machine upon economic life; or when the lecturer in art talks on the stimulus of art principles involved in streamlining, upholstering, and color to the sale of automobiles; or the lecturer in human biology deals with the cost of the common cold to American business, or the taxpayers' support of free clinics or veterans' hospitals—all these are picked up and turned

over to the builder of the economics comprehensive for possible inclusion. Out of this vocabulary material is built the first major section of the test.

Our next step is to examine and list all facts, all information items in the economic field, to arrange and sort these, determine their importance, and build from them the second section of the comprehensive. Our sources are again those for the vocabulary test—lectures, syllabi, texts, readings, and portions of these from other courses.

The third section requires a third re-examination of all the materials, this time for theories, hypotheses, principles, and laws; the ordering and analysis of these, and putting them in part or wholly into examination form.

At this point we launch a fourth section. It is made up of situations to be analyzed, problems to be solved which the students have never met before, so far as we can know, in any course or reading but the solution of which calls again upon the students' resources in vocabulary, fact, and principle. For this the problems or situations newly confronting society from day to day offer valid sources. For example, a question on the economics comprehensive in this section might quote a passage from one of the NRA codes and a problem be presented from the local or a distant state calling for a solution in the light of the quoted code. Thus liquor control might offer a series of questions on the economics, human biology, social problems, and chemistry courses.

We are experimenting further with a fifth section which is not graded but is analyzed. This sec-

tion tries to get at student attitudes. In economics we want to know how students feel toward free competition and individualism as opposed to one or another method of economic planning and social control. By analyzing these attitudes we can learn much about our students. We can further determine in many cases how to reshape courses for another year. Amusingly enough we can thus spot our yes-men and no-men, one student on a recent attitude test having answered in the positive on 86 per cent of all the questions and another in the negative on 84 per cent.

MEASURING STUDENT GROWTH

As a result of the findings on last year's comprehensives we are this year moving toward another examination objective. We are hoping finally to achieve techniques for the real measurement of individual student growth rather than to continue the static, unenlightened thing we have had. We are devising and trying pre-tests, that is, short form comprehensives to be given at the beginning. Then perhaps we can begin racing students against themselves and measure their acceleration and progress in terms of where they were then and are now. For example, in a preliminary trial, we gave a test in our physics survey. One student knew on the pre-test 3 items out of 250. By the quarter's end he knew 108. Another at first knew 104, at the end 152. On any usual grading or ranking scale the one with a solid achievement of 105 items would fail the course, the other with an achievement of 48 would pass. The first would feel defeated, bitter, unsuccessful. The second would be

elated at once again having "got by." There is much yet to be done in these matters.

Two other experiments in the General College I should mention briefly. The first, our writing laboratory, is achieving unusual results. Students who formerly considered themselves inarticulate are stimulated to write and rewrite, sketch, polish, lay in detail as I have never, in years of teaching English, seen it done before by so many. We do not neglect the usual formalisms of grammar, rhetoric, punctuation, but subordinate them to the main job of concrete vivid expression, of trying to get something said so that readers or hearers can share in it fully. The other is our experimental art studio laboratory augmenting the work of the lecturer in the Appreciation of Graphic Arts. The principle upon which we set it up was, in simplest terms, that a student might learn to appreciate the qualities of etching lines by making them. It was in no sense our objective to make artists of any who attended the laboratory. We have many other courses in the University for them. But many of our students are discovering not only principles of appreciation but a keen delight in dabbling with clay and pastel.

THE COUNSELING PROBLEM

This is part of the picture of the General College. None of it would be valid or effective, in my judgment, were it not for a counseling program. Concerning counseling, in the accumulation of test records, high-school data, health charts, home and personality factors by interview and by reports from our Testing Bureau, we think often that

its primary aim is to adjust a student to his curriculum and his college life. There is another function, however, that should be more clearly seen and made use of. That is by coming to a real understanding of students, their desires, interests, drives, and necessities not alone in terms of the duration of their college life, nor in terms of their possible future job, but more widely in terms of their life-long personal and social urges and capacities, and only by coming to such an understanding can we give them the education they should have. Counseling and guidance of students should be the basis of curriculum planning. When we inquire both by individuals and by groups whether or not they long for now and are likely to need in the future this unit in German in preference to that course in magazine reading, this course in analysis of Milton in preference to that in the wood-working shop where they might develop a hobby, then prerequisites and traditional channels become suspect. Certainly there is dire need of critical and objective re-examination of what we are doing.

There is another comparison sometimes drawn between Minnesota's General College and the College at Chicago. It is said and occasionally written that the real difference lies in the quality of the students in the two places. It is alleged that Chicago, a private institution, may and does select only the best students who apply, but that we in the state university must take all of whatever the high schools send us. This is the bright boy and dumb-bell categorizing. I cannot, of course, speak for the quality of Dean Boucher's students,

but for my own I can. I know that with few exceptions they are not any more stupid than most of the best of us. It is dangerously easy, even among the brilliancies of faculties, to call "dumb" those who cannot or do not do the things we do in the way we do them. We forget that we, too, in this sense are dumb in the things we have not studied or have little interest in. I wonder how many of us could pass a simple examination in the implied effects of President Roosevelt's devaluation of the dollar, how many of us would be dumb if asked to set up a liquor control plan for Ohio, make a trout fly, work a problem in acoustics, translate Hitler's biography, interpret in detail the Song of Solomon, a poem by Gertrude Stein, a Bach fugue, the psychological conditioning of a kidnaper, the causes of a sub-zero cold wave, the action of the photo-electric cell, or the probable physiological chemistry of allergic reactions. Even on university campuses I have known some teachers of languages to believe that some teachers of engineering were dumb, a compliment heartily reciprocated by the engineers. It is not my intention to belabor the point but perhaps it is thinkable that the students who submit too readily and conform to some of the things done in the name of education and scholarship are, after all, the dumbest of the lot. I say these things because, while it is true that the General College will accept so-called failures from other colleges, and should and does naturally get various non-academic students from the high schools, the college should perish and quickly if it were a blind alley, a by-pass, or a device for cutting

"lame ducks" out of association with white swans.

I know it to be an experiment in a new field of socialized general education, as the junior colleges are experiments, as progressive secondary schools and the adult education movement are experiments. We are all aimed—because education is a dynamic social force—to fill a present social need, to keep pace with social change, and perhaps, if our jobs be done well enough, to help breed and accelerate such change for the better. In striving toward these high ends, by what-

ever methods, we march together toward what appears to me to be on the near horizon a reorganization, not alone of lower divisions in universities, but of the whole structure. Why should we not plan to shift the pattern into a flexible system for training youth; general education its objective to the end of the junior college; an A.B. degree there, if we must have labels, to everyone who has achieved growth and maturity and who gives strong indications of being conditioned to continue under self-propulsion his education through life.

Reorganization at Indiana University

EDGAR L. YEAGER*

Indiana University, like most other colleges and universities, has felt during the last few years a need of reviewing its own organization and of considering whether or not it can offer more to some of its students by some changes in its requirements without jeopardizing its contribution to those whom it already is serving. During the early part of the academic year 1932-33 a group of our faculty members was instructed to consider what our university could do along this line. After some thorough study and careful deliberation, this group proposed to the faculty that an opportunity which is now known as the "Two-Year Elective Course" should be offered.

From the description which I shall attempt to make, it will be quite evident that Indiana University's plan is quite unlike that of the other universities represented by Dean Boucher, and Director MacLean. It may be well, first of all, to consider the purposes which this venture attempted to achieve.

PURPOSES ATTEMPTED

In the first place, we recognized that a very large number of students did not continue their college work beyond one or two years. As most people know who have consulted the data on this matter, the number is scarcely less than appall-

ing. Furthermore, it must be recognized that in this number are included those whose ability is very low and who, therefore, perhaps in small numbers, are those who cannot profit much from collegiate study. But we felt sure that there were also those who upon entering did not expect to continue in college more than one or two years. For this latter group we desired to offer greater freedom in the selection of studies. This offering was prompted by the belief that some students who expected to remain in college only one or two years may profit more from a program of studies selected in terms of their own individual desires and needs than by completing the first year or two of the regular four-year college course.

In the second place, it was considered wise to offer an opportunity to some students who could not otherwise be admitted to Indiana University because of the nature of their preparation. It had come to our attention that some high-school students who had not pursued the regular academic course preparatory to entering college might yet wish the opportunity to enter Indiana University. They might be graduates of commissioned high schools, but, with the distribution of their high-school work, they did not have the requisites for entrance to our university. Some of these would belong in the group of what is called "vocational students" in high school. In addition to this it was pointed out by some of our faculty

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members that there might be those who had not even graduated from high school who might deserve an opportunity to study in college. To offer such an opportunity to these students, it was granted that there should be some relaxation of entrance requirements for those who wished to enroll in this new course.

In summary, then, the purpose in this new offering was to permit students the opportunity to study in college who otherwise would not be permitted to enroll in one of our regular and established four-year courses and to allow those who could enter the regular course, but expected to devote not more than two years to general study, greater freedom in the selection of studies. Of course there is always a question concerning which studies in a curriculum offer the greatest value to the student. There has been a rather general accusation to the effect that in the regular four-year course the first two years exist for the purpose of the last two years. Some people feel that in the first two years the subjects are more largely of the nature of tools to be applied during the last two years. Some of these criticisms come from within our own college faculties and some, of course, do not. Perhaps some are justified and some are not.

FULL FREEDOM GRANTED

Some of our critics maintain that students are capable of choosing their own subjects and that they should be allowed greater freedom in the matter. Without in any way bringing up this question for application to all of our students, we decided to allow this opportunity to those whom we might expect to enroll in this Two-Year Elective

Course. Consequently it was granted that full freedom in the selection of subjects, with the exception of English composition and military science or physical education, would be granted these students. These two requirements, namely, English composition, and military science or physical education, were to apply to those students as they do to all other students in the university. For most students, these requirements amount to three semesters of work in English composition, and four semesters of military science or physical education for those who are less than twenty-two years of age.

During this first year of its operation, there have been no new or special subjects given for these students. They simply enroll in the regular courses which are open to persons with preparation such as they have had. In a few cases in which there are special desires and personal needs and qualifications, exceptions have been made to allow these students to study certain subjects not regularly open to persons with preparation such as theirs. This occurs with the special consent of the instructor in that subject or of the head of the department in which the subject is offered. It is gratifying to note the very hearty co-operation which we have had from these members of the faculty.

It must be pointed out, however, that it is not a matter of policy not to offer any new subjects for these students. Three new subjects were listed the first semester of this year, but the enrollment was not sufficient to warrant them being continued. It may be that other subjects will be offered next year. This re-

mains to be worked out during the next few weeks. Some contend that our real purpose cannot be achieved unless an entire curriculum is organized for these students; others maintain that the present offerings are quite adequate.

It should be remembered that our purpose is to serve those who expect to be in college not more than two years. We were of the opinion that we should proceed somewhat conservatively, and that after a year of experience with the course we would be able to determine more wisely what should be done regarding the curriculum. This is not to say that we are merely letting the immediate desires of the students determine what we shall offer. If, after completing our study of the present group, we feel that some special subjects should be offered, we shall not hesitate to recommend them. It is probable that there will be some changes in the work for the next year, but on this point we cannot speak definitely at this time.

STUDENT COUNSELING

One very essential part of the work, as has been indicated, is a careful study of our students. Each student is interviewed rather in detail before his program has been made out for the semester, and again at least once during the semester. Although, as counselors, we are in no wise concerned with dictating to the student what subjects he will take. We are active, however, in counseling with the student regarding his choice of subjects. In many cases, the students ask us to outline the subjects which we would recommend. Our suggestions to the student are based upon the analysis we are able to make of

his more profound interests and needs. It is wholesome to find that, in most cases, they wish to choose a program of subjects in order to achieve a very definite purpose rather than to avoid something for which they have already acquired an aversion. In a few cases there is an expressed desire not to take some particular subject, such as foreign language, or perhaps the science subjects which are required of those students who are candidates for a degree in the regular four-year course. Likewise, it is encouraging to note that so many do not select subjects on the basis of the difficulty or ease connected with achievement in them.

SPECIAL GOALS DESIRED

It is proper to report one matter which has particularly interested us. The proportion of students who express a desire for a general education or a so-called liberal education is very small. Nearly all of these students wish to attain some special goal other than a general education during the year or two that they expect to spend with us. It can hardly be assumed that this is peculiar to the students in this course. The speaker interviews briefly about eight hundred to a thousand students yearly, most of whom are in the College of Arts and Science. It has been his experience to find what he is obliged to call a very small proportion who evidence the desire to attain the goal of a general education. This may be construed to be a challenge to our revered idea that we are accomplishing so much through our so-called liberal education offerings. Whether these students really do not desire a liberal education or

whether they simply have acquired a vocabulary which makes us regard them more vocational in their interest is difficult to determine. It is not unlikely that our so-called liberal offerings are more liberal to us who offer them than they are to those who take them. Again, there may be the question of whether or not they are the kind that the cold world really needs. Maybe our student public is wrong in their desires, and maybe we are wrong in our conceptions of the value of our offerings for liberal education. It is the personal opinion of the speaker that the latter may be wrong, at least as much wrong as the former. Can it be that our general public needs to be educated on the value of the so-called liberal education, or can it be that we in higher education need to consider more seriously the liberalizing value of our offerings?

As indicated above, the students who have enrolled in our Two-Year Elective Course in large proportions wish to select subjects which aid them directly in some vocational achievement, such as office work, newspaper work, pre-law work, advertising, home economics, etc. Ten per cent, probably, are interested in some subjects which are required in other more technical schools such as engineering, embalming, art, and the like. Some have avowedly selected this course in order to get what they call the content subjects earlier than they could in the regular four-year course, in order to test their interests and their probability of succeeding in them. On the other hand, we have some who are primarily interested in a general course.

It is unfair to say at the present

that we are serving in this course all those students who expect to devote only one or two years to collegiate study, because some are not dissatisfied with the subjects offered in the first two years of the regular four-year course. We have made no attempt to induce all students who expect to remain in college only one or two years to enroll in this Two-Year Elective Course. On the other hand, we are not permitted to generalize that of all of our students who expect to remain in college not more than one or two years, the proportion referred to above who desire a general, liberal course is indicative of the real proportion who desire such a course because we are not sure that our offerings are really liberalizing in nature. It may be that these subjects which are offered them are merely the fragments of larger units which are specialized in nature.

It seems to the speaker that the latter is not altogether unlikely. These subjects which they may select are those subjects that have been designated to "integrate" with others to achieve the purpose of our regular four-year course. To whatever extent these four-year courses are specialized, we must confess that the separate subjects are specialized. In fact, it may even be that the separate subjects taken apart from the other subjects with which they usually occur are even less liberalizing and cultural in proportion than are the four-year courses of which they are a part. The speaker does not wish to infer that they are, but the question is a pertinent one.

On this point the organization is different from the organization in

either of the other universities represented by the speakers who have preceded me. In them, there is a conscious effort to have the work of the first two years lead to something specific, but not vocational. We should say that Indiana University's venture in the field is not an organization of subject-matter, but simply an opportunity to choose more freely from among the subjects now offered in our regular four-year courses. It is not correct to say that we have decided permanently that this is our final method for meeting our problem, because we are too young in our venture.

THE ADMINISTRATION

From the standpoint of administration, it should be said that the committee which administers this venture at Indiana University is definitely in the College of Arts and Science. Although we have been granted, at least temporarily, full charge of the venture, we do not consider ourselves in any official way a separate organization. The most cordial and co-operative relations between our committee and the deans of the College of Arts and Science must be acknowledged. A very small budget is allowed by the university administration for the necessary operation of this course.

Although this course is provided for those who expect to devote only one or two years to study in college, the student may extend his study beyond this period, if he decides later to do so, by transferring at the beginning of any semester to a course leading to a degree. The student is then obliged to meet the entrance and other requirements of the particular course to which he

transfers. In such case there will be no actual loss of university credit, but in meeting the requirements it will probably be necessary for the student to spend some additional time in college, inasmuch as some of the studies which he has taken may not be counted toward the degree sought, and inasmuch as he will probably have neglected some of the studies which are regarded as fundamental in the course. Students in the other divisions of the university may likewise transfer to the course at the beginning of any semester provided they have less than sixty semester hours of academic credit.

"JOINERS" AND "DUMB-DORAS"

Many have asked the question, "Will not this opportunity be used by students who wish to be in college merely to be 'joiners,' and who find the required courses irksome?" In other words, not a few have predicted that it will simply offer an opportunity for the weak student—the poor "dumb-dora"—who has no real interest in higher learning, to hang around the university longer and with less discomfort. Such persons have been aggressive in asserting that we have enough "pipe" courses to allow a student to "hang around" for some time, with the implication that they may either clog the machinery for the more ideal student, or else contaminate the other students.

Such assertions are peculiar, when viewed from some angles. If it be true that there are several "pipe" courses, these critics should note that these subjects are harbored and even supported by the already existing divisions of the university. Any attack should be

leveled at the subjects themselves, as a part of our regular four-year courses as they now exist, rather than at the students. Such subjects could scarcely be maintained if the total support came from the students in the Two-Year Elective Course. Not a few such critics are furthermore not differentiating between amount of effort required and the value of the results obtained. It should be remembered that the students in this course have at present no opportunity for studying in courses other than those offered by the already existing divisions of the university, which, then, really set the standards.

Judging from high-school achievement and the ratings made on a general college aptitude test, the difference between the general ability level of the students in this course during the first semester is not enough different from that of the students in the other academic divisions of the university to speak of. The data on this point for the second semester are not yet available. It remains to be seen whether or not any attempt on the part of students to misuse this course will occur. Should there be any signs of such a misuse, the Committee would not fail to remember the purpose of this course and act accordingly. Just what action would occur cannot be predicted at the present time.

One may wish to know what proportion of the ninety-two students who elected this course could not have entered other academic divisions of the university because of a deficiency in entrance requirements. First of all, only two or three who were not graduates of commissioned high schools were in

the group. Of these who were graduates, perhaps about one-half entered with some such deficiency. Of this group, some have already expressed the desire to make up such deficiencies preparatory to transferring to one of the other divisions of the university. With our present set-up, we regard this as a very favorable outcome, although we make no special effort in this direction.

A few figures may be of interest here. Of the ninety-two students who enrolled in this Two-Year Elective Course the first semester, six withdrew before the end of the semester. With only one or two exceptions, these were students whose achievement ratings placed them in the lowest quarter of our student population. Fifty-six re-entered this course again during the second semester and five others entered other divisions of the university. Thus approximately two-thirds of those who completed the first semester returned for further work in the university.

Records made by these students during the first semester have not been available long enough to make possible a summary of achievement. As compared with the other students in the university, the seriousness of these students can hardly be questioned. Doubtless a few could not be lauded by us, but this cannot be used as an argument against the course. Who of us does not feel that the seriousness of purpose of some of our other students is not most laudable.

WHAT OF THE FUTURE?

Regarding the future of this course, we cannot predict definitely at present. The plan had a perfectly

healthy and normal birth. It did not issue as a compromise between two opposing factions. We have no feeling that it is in any particular sense "on the spot." We are genuinely interested in the best contribution that we can make to our students. In no sense is this Two-Year Elective Course regarded as a competitor of any of our established four-year courses. Anything in our procedure that might be called conservative should not be interpreted as being skeptical. We are profoundly serious in this venture, and the final outcome depends upon what we see, after careful study, as results.

It is altogether probable that the number enrolled in the course will be larger next year. This statement

is made on the basis of the fact that it was quite late in the school year of 1932-33 that the announcement of this opportunity was made. But the magnitude of our contributions is not regarded by us as connected in any proportional way to the size of our enrollment merely.

We are not tied inseparably to our present plan, nor are we determined that something different from the established order of things must be devised. Of course we felt a need for attempting something a bit different, else we would not have instituted the plan. Above all we are keenly conscious of the necessity of constant attention to whatever is devised, realizing full well that the mere birth of a new plan does not guarantee a rich fruition.

The Junior College and Business Training

W. H. SPENCER*

A good many months ago I came across this interesting and startling statement of a well-known socialist:

We who are living today have witnessed the end of an era. Capitalism has had its glittering career, and has died in economic convulsions brought about by its own greed, cupidity, and stupidity. It doesn't know yet that it is dead and for some years to come it will go staggering about the world, a walking ghost.

Since that time others have testified to the decadence of the capitalistic system. Mr. Lindley has recently published a friendly interpretation of the New Deal under the pleasing title, *The Roosevelt Revolution*. Mr. Roosevelt, himself, addressing Congress on January 3 of this year, speaks of the public mandate "to build on the ruins of the past a new structure designed to meet the present problems of modern civilization." Some weeks ago Secretary Ickes told a New York audience that "a bloodless revolution had occurred turning out from the seats of power the representatives of wealth and privilege." In a less serious vein some one remarked that President Roosevelt had hastened to "recognize Russia while conservative politicians were running around in circles trying to recognize this country."

I am not so certain as our friend,

the socialist, that capitalism is dead. To paraphrase Mark Twain's classic conceit, the reports of its death are probably exaggerated. But no one can deny that it is very sick, and that it continues to be sick in spite of the heroic and drastic treatment which it has been undergoing during the past year.

Nor am I so certain that we can with accuracy describe the happenings of the past year as a revolution, bloodless or otherwise. They partake more of the nature of an evolution than of a revolution. When one considers recent changes in their proper historical setting, one must admit that they were not wholly unforeseeable. The legislative enactments of the past year constitute merely another attempt on the part of the people to civilize the capitalistic system and bring it under effective social control. If this is a revolution, it is only a phase of the so-called Industrial Revolution, that period in the history of industry which marks the emergence of the power-driven machine in productive processes.

The question whether or not these changes constitute the death-knell of capitalism, an economic revolution, or merely a phase of an evolutionary process is not so important as the fact that socially and economically we are, to use the words of Professor Overstreet, "moving in new directions," although it is not yet written whether ultimately we shall travel right or left. Even Mr. Harriman of the

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Chamber of Commerce of the United States admits that we have turned a new leaf in business and that we shall not return to the old régime of 1929 and the years before.

PROBLEMS BEFORE US

From whatever point of view we look at the present situation, it seems inevitable that we face a period of business readjustment and reconstruction such as we have never faced; and as we face this period, there are two major problems which education must attack vigorously and intelligently.

In the first place, business as never before in its history requires trained leaders; not merely leaders trained in the methods and technique of managing individual business units, but leaders with ability and vision to plan for whole industries; leaders with a keen sense of the dynamic element in society, with a keen sense of business honor, and with a keen sense of their social responsibilities. To a very large extent, our present economic distress arose from a breakdown in business leadership. Economically as well as spiritually, where "there is no vision, the people perish."

In the second place, we need an economically more alert and literate community, co-operating with a trained business leadership. An economically illiterate community is per se a dangerous thing. It has been said that we as a people are too ignorant, if not too stupid, to be trusted with such a delicate organization as the capitalistic way of doing business. For sheer stupidity, statements of certain Chicago society women recently published in a Chicago newspaper can

scarcely be matched. One woman commented on the hardship involved in getting along with only two gardeners when she had been accustomed to four. Another remarked that "you know, of course, that of all classes the wealthy has suffered most severely during the present depression." The Queen of France who advised her people to eat cake, if they had no bread, had nothing on these distinguished women.

An economically illiterate community places a premium upon and tends to breed an unintelligent business leadership. Just as the quality of political leadership is largely determined by the intelligence which we as a people display at the polls, so the quality of business leadership is largely determined by the degree of intelligence which we exercise in the bestowal of our patronage. The speculative orgy through which we passed in the period just preceding 1929 could not have reached its dizzy heights if we as a people, in our ignorance and cupidity, had not lost all sense of values, economic as well as spiritual. Business harpies prey upon the vitals of the gullible. Economic illiteracy breeds economic piracy.

These two problems—the development of a socially minded business leadership and the development of an economically alert community—are problems which education must attack vigorously and intelligently at all levels—in secondary schools, colleges, and universities and in programs of adult education. Educational institutions must re-examine their objectives, methods, materials, and curricula, in the field of business in particular

and in the social sciences generally, with a view to preparing for whatever order emerges from the present chaos.

PLACE OF THE JUNIOR COLLEGE

Our five hundred or more junior colleges with their hundred thousand or more students constitute an indispensable part of the educational system. They too must participate in the attack on these problems. They too must re-examine their objectives, methods, materials, and curricula.

For approximately one-half of its students, the junior college is a period of preparation for advanced work either in universities or in professional schools. A large percentage of these students will continue in general and scientific studies. A much smaller percentage will enroll in schools of business.

It is not necessarily within my province to comment upon the nature and scope of the work which junior college authorities should provide for this large group of students. In passing, however, I cannot refrain from pointing out two important considerations. In the first place, a large portion of these students will sooner or later enter business without any formal training for it. In the second place, all of them perforce will become members of human society — beneficiaries or victims of what James Truslow Adams has so aptly called "our business civilization." These two considerations impel me to think that the general program of the junior college should lay great emphasis upon the social sciences.

In making this plea for the social sciences, I am sure that I do not

ignore or minimize the importance of other general fields of knowledge. Scientific study will move on ceaselessly and irresistibly, and there is little that we can do, even if we were so minded, to retard its progress. The humanities can thrive only if we can solve the problem of human relationships and can bring under control the mighty forces which science has unleashed. If we fail in the solution of these problems, science may become a curse and the humanities may again be enveloped in darkness.

Students entering the junior college in preparation for professional training in a school of business should, in my opinion, follow substantially the same course of study which general students follow. They should acquire an appreciation of the physical environment in which they live. This justifies attention to the earth and natural sciences. For reasons much stronger than those in the case of general students, students preparing to continue in a school of business should acquire an appreciation of the complicated and rapidly changing social environment in which modern business is conducted.

Many students preparing for advanced study in a school of business very early in their educational experience manifest a strong interest in courses which have a "practical value." Psychologically it is unfortunate that such interest cannot be exploited when it appears. It may, therefore, be appropriate to allow these students to enter upon the study of statistics or accounting, or both, if this does not impinge too greatly upon the time available for general studies.

For approximately half of its

students, the junior college constitutes the end of formal education. For a part of this half of its students, the junior college curriculum furnishes general and cultural courses. For another part, the curriculum provides technical, vocational, and semiprofessional courses.

In my opinion, it is more important to give to these two groups of students an appreciation of their social environment than it is in the case of students who will continue their work in the upper divisions of a university. The latter in their advanced work can scarcely escape further training in the social sciences; whereas, for the former, training in the social sciences in the junior college may be, and in most cases is, their last opportunity.

In so far as the junior college offers formal and professional training for business, the program should be basic and fundamental. It should as a minimum give the student an appreciation of his social and physical environment; and an appreciation and mastery of the more common techniques employed in management, such as accounting and statistics. As a maximum the program may, in addition to the foregoing, introduce the student to methods and problems of management in one or two pervasive fields, such as marketing and finance. It is important, however, to see that the semiprofessional work shall not crowd out that part of the program designed to give the student an appreciation of his social environment.

I do not have the time adequately to discuss the question of how far a junior college should offer strictly

trade or vocational courses as contrasted with professional courses. It must be remembered, however, that many standard colleges and universities are committed to the policy of giving their students technical tools with which they can begin work immediately upon the completion of formal education. Even if we were minded to reverse this policy, we should probably encounter serious difficulty in view of the great pressure for "practical instruction."

On the assumption that the policy will continue, I am strongly of the opinion that in the attack on economic illiteracy the junior college authorities should encourage, if not compel, these students to acquire some appreciation of the social environment of modern business. Most students will see the necessity of acquiring the requisite vocational techniques, and will acquire them in business or elsewhere. But if in their formal education they are not at least baptized in the social sciences, the likelihood is great that their social and economic thinking will always be circumscribed.

And it is this consideration which leads me to think that the policy of furnishing students in secondary education with vocational techniques is socially and educationally sound. The business world requires a vast army of workers with these techniques. Institutions will inevitably exist to develop them. Public and privately endowed institutions, in their more or less detached atmosphere, can probably perform the task more effectively and economically than business or proprietary schools can perform it. Moreover, the public

or endowed institution can and usually does expose its students to the art and science of living together, a thing which neither business nor the proprietary school is likely to do.

IRRADIATING INFLUENCE

The junior college can also participate in the development of a better business leadership and a more intelligent community through the irradiating influence of its faculty in the community in which it is located. This, it can do in a variety of ways—through extension programs, public lectures, faculty participation in civic activities, and faculty membership and association in various business groups. These various activities constitute a meeting ground for academic and practical minds. This mingling is of value to both.

The term academic comes to us from the Greek word *Academia*, a grove just outside Athens in which Plato and his disciples walked and talked. In time, the word in its most favorable connotation has come to mean something detached and remote from reality. In its most unfavorable connotation, it has come to be a term of opprobrium and derision. It was undoubtedly in the latter vein that a prominent business man of Chicago some time ago ascribed a large part of our present economic distress to college professors. Said he, in substance: "They talk too much and do too little. They must be cowards at heart, otherwise they would not have retired from active affairs." Perhaps it was in the same vein that Herbert Spencer once said that his idea of a great tragedy was a

beautiful theory murdered by a gang of brutal facts.

I shall not pause here to consider the differences, if there are any, between academic and practical thinking. But it is worthy of note that within recent years the world of affairs has more and more turned to the academic world for assistance. The World War demonstrated conclusively that the academic mind, largely because of its detachment, has something to contribute in the solution of practical problems and in government and industry. Washington at present is not as full of college professors as newspapers and cartoonists would have us believe, but the fact remains that the academic mind is very much in evidence in the present emergency. The academician has as never before left the cool shades of *Academia* to walk and talk in factory and mart.

In this field of extra-academic activity, the junior college has an excellent opportunity for service. J. B. Griffing, in commenting upon the junior college as a community center, makes this excellent statement of its function:

First, a junior college is definitely responsible for the intellectual leadership of the community in which it stands. Second, a junior college instructor owes an obligation of participating citizenship to the community in which he resides. Third, collegiate leadership involves the maximum development and co-ordination of local talent and resources.

Recently, in an effort to get some quantitative evidence of the nature and extent of the irradiating influence of junior college faculties, we sent out a questionnaire to 466 jun-

ior colleges. We received 178 replies. Of the institutions replying, 124 offered work in business and economics, 17 offered work in economics only, 4 offered secretarial training only, and 2 had been discontinued. I shall briefly summarize the findings in terms of the questions asked.

1. *How many members of your staff teach business and economics subjects?*

Of the schools replying that they offered work in the fields in question, the average number of teachers is 2.6. Of these, the average of the public institution is 3.1 and of the private schools, 2.1.

2. *Do you encourage their membership and activity in local business groups, such as Chambers of Commerce, Rotary, etc.?*

Of the 124 schools offering work in business and economics, 74 per cent encouraged membership in such organizations. It is probable that the 36 schools failing to answer the question are situated in smaller towns in which there are no such organizations. Several stated that they believed in such contacts but that the opportunities for making them did not exist.

3. *How many faculty members in economics and business belong to such organizations?*

The 124 schools teaching business and economics reported a total membership of 142 faculty members belonging to Chambers of Commerce, Rotary, and similar organizations. Of the total, 28 per cent have no members, 33 per cent have one member, 15 per cent have 2 members, 13 per cent have 3 to 8 members, and 11 per cent did not answer the question. Two schools,

having no work in business and economics, reported 4 members in such organizations.

4. *Do members of the community frequently come to faculty members in business and economics for advice in personal financial matters?*

Of the schools teaching business and economics, 61 answered affirmatively, 55 answered negatively, and 9 did not answer at all. One school said that members of its faculty were "constantly" approached for such advice. Two schools having no work in business and economics answered in the affirmative. In one of the two cases a chemistry professor was the gentleman who gave the advice.

5. *How many articles on economic and business subjects were published by faculty members during the year 1932-33?*

Twenty-nine schools reported that articles in the fields in question had been published by members of their faculties. Of this group, 3 answered affirmatively with a question mark as to the number, one said "several," and one said "many." The remaining schools reported 60 articles, or an average of 2.3 per school. The private junior colleges reported an average of 3.0 articles per school, while the public junior colleges reported an average of 1.8 articles per school.

6. *How many faculty members gave formal extramural talks on business topics during the year 1932-33? Estimate the number of such talks.*

Of the schools offering work in business and economics, 66 public institutions replied. Twelve of them

said that members of their faculties had given no such talks. The remaining public schools reported 483 public appearances by faculty members, or an average of 9.0 for the 54 institutions. These institutions have 117 instructors. These gave 483 talks, or an average of 4.0 each.

Sixty-two private schools answered, 12 of which reported no talks. The remaining 50 gave 226 talks, or an average of 4.5 for the 50 schools. These private schools have 57 instructors in business and economics. They gave 226 talks, or an average of 4.0 each.

7. *Check the various media in which the college offered instruction in consumer education, investment education, personal accounting, and analysis of current business events.*

Sixteen institutions reported extension courses covering these topics. Thirty-nine sought to meet the needs by public lectures. Thirty-three reported activities in these fields through personal advice of members of faculties. In 51 institutions this type of instruction was conveyed through extramural talks. Nineteen institutions indicated that these subjects had been covered by articles. The analysis of current business events, as one would have expected, received most attention, almost twice as much as any other topic. Personal accounting received the least.

On this scanty evidence, I quite realize that it is not safe to base many generalizations. Moreover, we have no objective standard by

which we can compare these activities of junior colleges. The evidence does, however, seem to justify these general statements. In the first place, the need for assistance by faculty members does exist. In the second place, many junior colleges recognize the existence of the need and are meeting it very effectively. In the third place, junior colleges as a group have not, as fully as they might have, exploited the opportunities for service in the field of extra-academic activities.

I wish, however, to avoid being misunderstood. While I am convinced that the meeting of academic and practical minds has individual as well as social value, I am also convinced that there are limits beyond which it is not safe to encourage faculty members to go. The academic man must always preserve a proper degree of detachment. This is one of his chief assets in dealing with practical problems.

IN CONCLUSION

We may turn out "from the seats of power the representatives of wealth and privilege," we may "build on the ruins of the past a new structure," but to what avail? The creation of new economic machinery will not per se save us. The two-fold task remains—the development of a more socially minded business leadership and the development of a more alert community. This is largely the task of education. The despair of the business world is the opportunity of the educational system.

Orienting the Freshmen

J. C. MILLER*

Educational institutions in the United States have become what they are through a process of evolution. Since the opening of Harvard in 1636, each year has brought about some change, amounting in the course of the last century almost to a revolution. Heralded as innovations in particular colleges, these changes in turn were widely discussed and often adopted by other institutions with unreasoning enthusiasm. Yet, often, when they were at the height of their popularity, they were frowned upon by the more conservative and treated as fads unworthy of serious consideration. And, indeed, they had all the earmarks of fads, being enthusiastically discussed at local, state, and national meetings, only to yield their places to new topics which followed the same course.

Yet these innovations were not fads, for a fad is a movement or line of thinking that flourishes for a time and then passes into oblivion. The so-called educational fads do rise, reach a peak, and decline in the amount of publicity given them, but they do not perish, nor are they cast aside as a whole. It is true that in their heyday they sometimes fall into the hands of unscrupulous or untrained educators who, in an endeavor to appear ultra-progressive or to exploit the new idea for college publicity, cause

the innovation to fall into ill repute. But eventually whatever is good about the scheme is salvaged by responsible educators and becomes an integral part of sound educational practice, to be accepted without question by the next generation.

A few of the innovations within the memory of many of us are the elective system, introduced into Harvard by Charles W. Eliot, the system of majors and minors, honors courses, the tutorial system, curriculum revision, college experimentation, comprehensive examinations, orientation and survey courses, freshman week, and character education. Most of these, like my subject, the orientation of college freshmen, have risen and fallen in popular interest in the manner indicated.

AUTOPSY OR REVIVAL?

A few years ago freshman orientation was a very popular topic. Many magazine articles and books were published on the subject. The theme was discussed at association conventions. It has waned in popular interest during the past three or four years. In 1930 the writer prepared a bulletin which was published by the University of Missouri under the title, *The Induction and Adaptation of College Freshmen*. At that time many articles and a number of books on the subject were appearing annually. In an attempt to bring the material up to

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date the *Reader's Guide* was consulted, and it was found that the heading "Orientation of Freshmen" has been dropped. Only one article under that title has been listed since 1930. With this discovery I began to wonder just what your president had in mind that I might contribute to this program. I was not certain whether I should hold an autopsy or attempt to effect a revival.

The expression "orientation of college freshmen" has come to have a rather definite meaning in college parlance. There are two main purposes sought in the orientating procedure: first, a proper adjustment of the first-year student to college life; second, the development of a desirable perspective of life in general on the part of the student. The topic has lost some of its popularity partly because it has been rather widely accepted, and partly because the situation which it was meant to correct has materially changed.

NEED FOR ADJUSTMENT

From the close of the World War until 1930 students appeared in ever increasing numbers demanding admission to college. All kinds of students appeared—capable and otherwise. During this period there were frequent revisions of the salary schedule, and these revisions were always upward. The average instructor was able to maintain higher living standards than at any previous time. There seemed to be no need to make any special effort to remove the difficulties which were causing such a high rate of freshman mortality. There were too many freshmen anyway. In 1928 a 30 to 40 per cent freshman mortality was not unusual. In 1928 Ira M. Smith, registrar of the Uni-

versity of Michigan, pointed out that of the three hundred thousand freshmen who were admitted to institutions of higher learning in the United States in September 1927, one hundred thousand would not return to the college of their first choice in September 1928.

President Rightmire of Ohio State University voiced the observations of many college administrators in an address made to the freshman group during Freshman Week in 1929. He said, "Look at the one on your left. Now look at the one on your right. I want you to take a good look at these individuals because one of them will not be here next year." So many freshmen, under the pretense of optic disorder, left one of our large universities at the end of the first semester that the trains carrying them were dubbed the "sore-eye specials."

During this time there were those members of the college staff who had an altruistic regard for the freshmen and felt that they were not being dealt with in as humane fashion as they deserved. But they were able to command the respect and support of only a part of their co-workers.

When the depression set in it was soon apparent that there would be a decrease in the number of students. The institution which derived an appreciable part of its income from student fees had a reduced revenue. Publicly supported institutions had a cut in revenue roughly proportional to their loss of students. The obvious result was lowered salaries. The economic inconvenience tended to soften the feelings of the college instructors toward floundering freshmen.

My analysis of the situation is not to be construed as questioning the general altruistic spirit of college faculty members. No large move that affects a great number of people has ever been successfully promoted solely on the basis of altruism. The Civil War could never have been won on a moral or humanitarian basis. It took the slogan, "Preserve the Union." The Eighteenth Amendment would probably never have been passed on the basis that it is wrong to drink. It took the idea, "It will help win the war." It would probably not have been repealed on the basis of the restoration of personal liberty. It had to be attached to the proposition that it would help restore prosperity. The present attempt to abolish child labor is motivated, not by sympathy for the child workers, but by the necessity for providing employment for adults. Similarly, the movement which had for its purpose a more humane treatment of first-year college students took on more meaning and commanded a greater following when it became apparent that its success would contribute to a larger enrollment and probably result in salary increases.

Too much time has been devoted to the proof that freshman orientation still lives and may be worthy of a place on this program. As the general features of the orientating procedure are familiar to you, I shall review them only briefly.

The work of college orientation programs may be roughly divided into four parts: (1) before the student enters, (2) freshman week, (3) orientation and survey courses, (4) student guidance.

BEFORE THE STUDENT ENTERS

The transition from high school to college is not easy, as the freshman mortality rate will indicate. The conviction is growing among school men, especially those who have to do with the admission of college freshmen, that the area in the student's experiences just before entrance to college is a field which, if properly cultivated, will materially reduce the magnitude of the transition.

The newness of the situation is undoubtedly one of the factors which contribute to the confusion of the entering student. Everyone stands in some awe of the unknown. The most appalling thing about the first voyage of Columbus was that he had no positive knowledge of what lay ahead. If the student were better informed about the college and the college better informed about the student at the time of entrance, certainly a great part of the barrier between high school and college would be removed.

The pre-entrance program has come to include many features. The scope and nature of the work is suggested by such titles as informational literature, personal interviews, big-sister programs, application for admission and information blanks, cumulative records, and state-wide testing programs. Time will permit only a brief consideration of two of the titles: informational literature and testing programs.

The informational literature is usually headed by the college catalogue, and while the catalogue is a mine of information for those who know how to use it, to the average high-school senior it is largely an

unintelligible document. A new type of literature has been developed especially designed for the guidance of the student before entrance. This literature is published in the form of pamphlets, bulletins, booklets, and handbooks. It presents information of immediate interest to the prospective student in a manner that can be understood by the average high-school senior or graduate. The titles of a few publications will serve as illustrations: *A Suggested Program of Pre-College Guidance for High Schools*, a bulletin published by Ohio State University; *Who Shall Go to College?*, a pamphlet published by the University of Minnesota; *Information for Faculty Counselors and Student Assistants*, a booklet published by the University of Wisconsin. This type of literature is certain to come into larger use.

The state-wide testing program for high-school students will undoubtedly be extended. The program is usually sponsored by either the state university or the state association of institutions of higher learning. For a number of years college aptitude tests have been given to high-school seniors throughout the state of Minnesota in February and March. The high schools at that time report the scholastic ranks of their students. The tests are scored at the university, the college aptitude ranks calculated, and a report is sent to the high-school principal by the first of April. Through the years an accurate interpretation of the ranks has been developed. The high-school principal is provided with definite information and can thus advise students with more assurance.

Fifteen states now conduct state-

wide testing programs. A plan is under way to extend the testing service to include both aptitude and achievement tests and to administer them to high-school sophomores and juniors as well as seniors. This year, 1933-34, for the first time college aptitude tests are to be administered throughout the state of Missouri. The program is being sponsored and financed through the co-operation of the University, the state teachers colleges, and the State Department of Education. Until a system of norms has been evolved in each institution, those which have been compiled at the University of Minnesota will be used.

FRESHMAN WEEK

The idea of freshman week originated at the University of Maine in 1923. Almost overnight the concept was received with favor by leading colleges and universities throughout the United States. At present it has been adopted in some form in most of the large colleges and universities, though usually it does not occupy an entire week. The time devoted to it varies from one to seven days, with a period of three or four days being most commonly adopted.

The typical freshman-week program is divided into three main groups of activities: those that acquaint the student with the educational activities of the institution; those that help the faculty and administration to understand the student's needs and possibilities; those that are recreational and social in nature, which keep him from feeling lonely and help him to make friends from the very beginning.

In various studies made of the reaction of students to freshman-

week activities the most useful features seem to be the personal contact with members of the faculty in advance of registration, and information received as to the process of registration and the use of the library. On the social side, the big-brother and big-sister activities, if well managed, have been very helpful.

Some commonly expressed objections are the dullness of faculty lectures, too much activity for students who are being rushed by fraternities and too little for others, and too many intelligence tests.

The wide acceptance of freshman week and the rather general satisfaction expressed by students and faculty where it has been carefully organized seem to make any justification unnecessary, particularly in large schools. Only one systematic evaluation of freshman week has been published. The study was made at Ohio State University by W. H. Cowley, and pooled opinion gave overwhelming approval to the program.

In the small junior college, the value of freshman week is questionable. A series of unusual events would tend to give the student a distorted idea of college life. A scheme of registration which will introduce the student to the normal college routine as quickly as possible is desirable.

ORIENTATION AND SURVEY COURSES

While orientation and survey courses are usually spoken of together, like ham and eggs or Amos 'n Andy, they are not the same and fulfill different functions, though often overlapping and merging into each other. The orientation course is designed especially to help the

student to adapt himself to college problems and situations. The survey course, strictly speaking, is a course designed to orient the student in the larger fields of thought, such as natural science, social science, and art.

First introduced as a course yielding college credit at Reed College, Portland, Oregon, in 1911, the orientation course has spread over the country and has been adopted in many leading colleges. Of the 168 liberal arts colleges co-operating in a study in 1931, eighty offer either orientation or survey courses. If the same proportions hold in other colleges, the movement has gained wide acceptance.

The typical orientation course aims to assist the student in the techniques of study, such as the use of the library and other facilities of the college, taking notes, increasing his speed of reading, enlarging his vocabulary, and budgeting his time. It is often concerned also with his choice of social and athletic activities and his personality and religious problems. Such a course could well be built about the book *College and Life*, by Bennett, or some good book on vocations, applying the techniques of study to subject-matter of interest and use to the student.

The survey course has also been successful in many colleges, large and small. Given usually in the freshman year, either as one course or as a group of courses, it aims to show the student the underlying unity of the whole field of human knowledge and thus help him to find his place in the world. The survey courses offered at the University of Chicago and at Columbia University are excellent examples.

FRESHMAN GUIDANCE

Student guidance is the foundation for the super-structure of the other orientating procedures. The subject is far too comprehensive for me to do more than mention its general nature and importance. Although students have received individual guidance from college officials and faculty members since the opening day of Harvard, the movement has had a distinct revival of impetus during the last decade. With the coming of students in greater numbers, it became apparent that some systematic scheme was needed to further faculty-student relationships. The individual was being lost from sight.

Certain large universities were the first to develop plans for carrying on a guidance program. Since 1923 an organized plan of student counseling has been evolved at the University of Minnesota. It is under the direction of the Committee of Faculty Advisers. Since 1922 the office of personnel at Northwestern University has been developed. This division of the University is under a director who has a number of assistants and is co-ordinate with other divisions of the University. All student counseling is conducted through this office. At Ohio State University freshman counseling is under the direction of the Junior Deans. The work at these institutions is mentioned to indicate the time the movement was introduced and the different forms of organization which have evolved. The new order of personnel work has been taken up by all types of institutions of higher learning large and small. Since each has its own peculiar organization and problems, different

types of programs have been developed. However, the faculty advisory plan is in much more general use than any other.

The general functions of the guidance programs are the same. They have been stated by Paterson, of the University of Minnesota, as "first, to bring about a more harmonious adjustment of individual students to the opportunities available within and without the college; and second, to establish a friendly and constructive personal relationship between individual members of the faculty and students."

The essential features of effective guidance are: (1) a definite plan of organization, (2) advisers trained in counseling technique, (3) accurate data, such as cumulative records, test results, and personal information.

This rambling airplane ride over the entire field has been intended to point out the salient features of freshman orientation. These features have reached their highest development in the large colleges and universities. The question arises, Are they applicable or practical in the small junior college? I shall reply to this question by describing briefly a plan of student guidance in a small junior college. I feel certain that my description will not be interpreted as an attempt to exploit my place on this program in the interest of Christian College. Those of you who have daughters will enroll them in your own colleges when the time arrives. I describe our program, not because I regard it as a model, but because it is the outgrowth of considerable study of the new type of personnel work and because it has been used with some measure of success.

GUIDANCE AT CHRISTIAN COLLEGE

At Christian College pre-entrance guidance is begun as soon as the student expresses her intention to attend the college. Various items of information are assembled. She is asked to complete an information blank. Her high-school record and her interests and plans as expressed on the information blank are studied carefully. A tentative program of studies that seems suited to her needs is prepared and sent to her so that she can think it over at leisure and discuss it with her parents while she is still at home. She is then assigned to a faculty adviser on the basis of major interest. Before the opening of school each adviser is provided with a folder for each of her advisees containing all the assembled information, including a copy of the proposed program. She familiarizes herself with this information before the student arrives.

Printed instructions for registration direct the student to report to her adviser. Since each faculty adviser is responsible for only a small group, never more than fifteen, she is able to devote ample time to each girl and her problems. A faculty member may spend as much as an hour with one girl discussing her course of study or any phase of college life which the student may introduce. In a junior college it is usually necessary that the student be advised regarding the freshman-sophomore requirements of the university in which she will likely continue her education.

During the first two weeks of school the Psychological Examination, the Seashore Music Tests, and several subject-matter placement

tests are administered. In the light of the information obtained from these tests and from the first two weeks of the student's college work, such changes as seem advisable are made in her schedule. It is felt that an occasional change in schedule is less disturbing to student morale than would be the gorging of students on tests during the first day or two.

Early in the first month of school each girl has a half-hour conference with her adviser, who attempts at that time to discover how she is adjusting herself to college life. The adviser then writes a personal letter to the student's parents. When grades for the first six weeks are reported, those of the first-year students are given to the faculty adviser who again talks with each advisee and suggests methods for improvement to the student who is having difficulty. Several scheduled conferences are held during the year. In addition, students are constantly meeting their advisers informally and always feel free to call on them for help. At times during the year when any situation warrants communication with the parents, letters are exchanged between the adviser and the parents of the student.

Occasional meetings of the committee of advisers are held throughout the year. These meetings permit the exchange of experiences and serve as a clearing house for ideas which prove mutually helpful.

The program of guidance at Christian College has greatly reduced dissatisfaction with courses of study and later requests for changes. It has brought about a greater friendliness and cordiality between faculty members and stu-

dents which has resulted in a happier student body. It has increased the holding power of the college. At the opening of school this year 71 per cent of the first-year class of the preceding year returned. So far not a single student has withdrawn from Christian College this year.

CONCLUSIONS

In conclusion, I wish to express as my belief that whether we are in sympathy with it or not, a rather elaborate system of student orientation seems to have come into the college to stay. The junior college movement itself has developed partly as an answer to the protest against the impersonal attitude of universities and large colleges. The junior college organization at the University of Minnesota, as described here this morning, is a culmination of the principles of education for which the sponsors of the orientation movement have clamored.

Just as a new interpretation of democracy is being accepted by the

general social order, so a new type of democracy in education is destined to supplant the aristocracy of learning that has long held sway. It is probable that the future of our country and of civilization will be shaped by men and women rather than by units of subject-matter. If this assumption is true, it would seem practical to adapt the scheme of education to the individual, even at a slight sacrifice of academic excellence.

Regardless of the name which may be in vogue for the movement, whether orientation, guidance, counseling, or adaptation, the underlying philosophy has made its imprint upon educational practice. The general tone and spirit of the colleges have been improved by the more human and personal element that has been introduced. The idea of educating individuals has returned to supplant that of educational mass production. Mark Hopkins is back, the student is here, and all that is missing is the log, and we are working on orientation, the synthetic log.

Minutes and Committee Reports

MINUTES OF THE MEETING

The fourteenth annual meeting of the American Association of Junior Colleges was held in Columbus, Ohio, February 23-24, 1934. Delegates and visitors were registered from twenty-nine states, the District of Columbia, and the Canal Zone.

The meeting was called to order by President A. M. Hitch. After the introduction of delegates and visitors, Hon. B. O. Skinner, Director of Education for the State of Ohio, made an address of welcome.

The program was presented according to the published schedule except that Dr. Malcolm S. MacLean and Dr. Nicholas Ricciardi were not present. Dr. MacLean sent his paper, however, which was read by President John W. Barton.

A new departure in the program was instituted this year. The luncheon programs for representatives of public junior colleges and of private junior colleges were continued throughout the afternoon. The problem of federal aid for junior colleges was presented and discussed. At the request of the members present the President appointed the following Committee on Federal Aid: Arthur I. Andrews, chairman; E. E. Cortright.

At the request of the private-school group the following Committee on a Code of Ethics for junior colleges was appointed: Richard G. Cox, chairman; Roy T. Davis; H. G. Noffsinger.

The Committee on Standards requested the privilege of delaying its report until after the publication of the study of standards by the North Central Association.

The report of the Committee on Research was read by Dr. W. W. Carpenter of the University of Missouri. After the report the following standing Committee on Research was ap-

pointed: W. W. Carpenter, chairman; J. Thomas Davis; J. L. Hancock; J. E. Burk; R. R. Robinson.

The Secretary gave a report of a study of academic costume¹ and upon recommendation of the Association the chairman appointed the following committee to study the problem further and bring definite proposals to the Association regarding academic costume and certificate for graduation: Robert J. Trevorow, chairman; A. C. Olney.

The report of the Executive Committee was read by the Secretary and was adopted. The Chairman appointed the following committee to devise plans for a nation-wide study of the whole junior college field: D. S. Campbell, chairman; Robert J. Trevorow; Nicholas Ricciardi.

The following reports of committees were adopted and they represent the official actions of the Association.

The papers and reports presented are printed in this issue of the *Junior College Journal*.

DOAK S. CAMPBELL, *Secretary*

PUBLIC JUNIOR COLLEGES

The luncheon meeting of the public junior college group was well attended, there being forty present. Following the luncheon, the program was introduced by the chairman, Dean J. F. Wellemeyer, Kansas City, Kansas.

The first paper was read by J. Leonard Hancock, former Dean of Crane Junior College, Chicago, and told the very interesting story of the closing of this institution. Mr. Hancock's paper appears elsewhere in this issue.

"Federal Aid for Higher Education"

¹ See *Junior College Journal*, April 1934, pp. 362-65.

was presented by Arthur I. Andrews, of Grand Rapids Junior College. He described the interesting procedure in connection with the Federal ruling of the relief administrator released on February 2. He explained that the first thought was not to include the junior colleges at all and that the introduction of these institutions was due largely to the influence of Commissioner Zook. It was pointed out that the junior colleges must be alert to the situation in any future rulings that are made. Administrator Hopkins is not primarily interested in college budgets. His entire interest centers in the idea of relief. The announcement of the ruling coming so late was a great disappointment to many institutions, but they were warned to make plans early for the coming year. Mr. Andrews suggested the appointment of a committee which would be authorized to represent the American Association of Junior Colleges in seeking a continuation of this or a similar plan. Dr. W. C. Eells also spoke on the Federal program.

A third topic was presented by Dean E. Q. Brothers, of Little Rock, Arkansas. Dean Brothers took as his subject "Possible Adjustments of the Small Junior College to Help in Meeting the Present Need." His presentation was not in the form of a prepared paper, so a brief synopsis may be given. In the junior colleges today, many are not taking adequate steps to meet the time. A great deal is said of the forgotten man, but few are thinking of forgotten students—young people who spend one or two years in college and do not go on. Junior colleges to date have done very little in the field of terminal courses. Many of these institutions are kept from branching out to meet the need by the fear of the college or university above. Just as the high school waged a battle over admission credits now the junior college has the same fight on its hands. Dean Brothers suggested

that in the social sciences much of the stated textbook material be eliminated and start with the problem leading the students back to library and current material. He suggested that we start with the known and then go to the unknown. In literature as well, he would start with the current selections and make it a living thing, bringing contact with the immediate problem of today. Even in science there is much of research that grows out of a current problem and present need. In later specialization more mental treatment could be given. From the social standpoint, the challenge to all is found in people in higher places who are considered great successes and yet it is well known that they have been dishonest. The young man who wrote to the editor of a great magazine and asked him to give him one good reason why it paid to be honest presents a challenge that we cannot overlook. The small junior college is not equipped to give a highly specialized vocational training, but it can teach students how to live, how to become good citizens, how to provide recreation for the leisure hours that are bound to come.

Following this paper, there was a lively discussion and group action was reflected in a number of motions. A committee was authorized to urge the appointment of a Federal Aid Committee of the American Association. A motion was passed asking the Resolutions Committee to consider the importance of the problem of Federal support of education throughout the entire country. The chairman of this group was authorized to convey to the Resolutions Committee our hope that some mention be made of the situation of Crane Junior College and the great disadvantage to the youth of Chicago occasioned by its closing.

SECOND SESSION

So interesting were the discussions of the first day that the group voted

to continue in a similar meeting on Saturday. The chairman invited Dean C. S. Boucher, of the University of Chicago, to attend the luncheon and submit to questioning. Dean Boucher had just completed reading his paper in the general session. The program of the luncheon meeting took the form of questions and answers. It was clearly pointed out that there is a definite distinction between the social maturity of students and mental alertness. Particularly in these times, it is necessary to consider the importance of keeping younger students well occupied rather than crowding them through their courses merely for the sake of winning a diploma and then finding nothing to do. The question was asked very pointedly whether or not the junior college is a part of the secondary school, which was naturally followed by the question as to what constitutes secondary education. It was rather regretted by most of the people present that high-school education and secondary education were so often confused. It was pointed out that college methods and college material had been brought definitely into the high-school and secondary school levels. It seemed inevitable that following such a discussion the next question should be "What is a college?" Dean Boucher replied that President Hutchins would include the last two years of the high school and grant a degree at the end of the junior college period. He admitted that the label of the degree was unimportant but that the system would be hard to change. Considered from almost any angle, the junior college unit or division has become one of the most important of all parts of the educational system.

In the last minutes of the session someone brought up the matter of character education. Dean Spencer, of the University of Chicago, said the whole question of character training could be clarified if we could eliminate

the over-emphasis on profit from business organization. The discussion continued up to the moment when the chairman declared the meeting adjourned in order to attend the last general session of the association.

W. W. CARPENTER, *Secretary*
J. F. WELLEMAYER, *Chairman*

PRIVATE JUNIOR COLLEGES

Minutes of the sessions of the private junior colleges have not been furnished. The program was carried out as printed. The papers by Emma I. Sisson and by E. E. Cortright are presented in full in this issue.

PHI DELTA KAPPA

No report of the Phi Delta Kappa breakfast has been received. About forty were in attendance. The principal address was given by Dr. Arthur J. Klein, of Ohio State University, "The Junior College and the Future Reorganization of Education." Dean H. B. Wyman, of Phoenix (Arizona) Junior College, was re-elected chairman of the group for next year.

RESEARCH COMMITTEE

As none of the members who prepared the report for this meeting had previously served on the Research Committee, a study was made of the committee reports of past years, in order to determine the functions of the committee and the nature of the report to be given.

At the sixth annual meeting in Chicago, in March 1926, a motion was passed authorizing the appointment of a committee from the Association to seek to interest foundations and men of means in fostering the junior college movement. The chairman of this committee, L. W. Smith, in making his report at the seventh annual meeting in Jackson, Mississippi, in No-

vember 1926, suggested the appointment of a research committee. A motion authorizing the incoming president, Mr. Lee, to appoint such a committee was passed. The president appointed Mr. Smith as chairman of the committee and Mr. Wood, of Stephens, and Mr. Winfield, of Lon Morris, as members. The major purpose of this early committee seemed to be to secure subventions to carry on studies as is indicated by Chairman Smith's report to the eighth annual meeting in Chicago in March 1928.

Following the Chicago meeting the secretary of the Association submitted to each junior college a comprehensive questionnaire concerning such matters as size and growth of junior college, the teaching staff, the curriculum, specialized equipment and finances. The returns were made available to the Research Committee and a preliminary study of them was presented at the ninth annual meeting. Chairman Smith presented the details of this study at the tenth annual meeting at Atlantic City in November 1929. After the Atlantic City meeting, changes were made in the personnel of the committee with the exception of its chairman. Other members of the committee were Vande Bogart, Northern Montana School; Oppenheimer, Stephens; Cortright, Junior College of Connecticut; and Balduf, Central YMCA College of Chicago.

Chairman Smith, at the eleventh annual meeting in Berkeley in 1931, indicated certain principles of committee procedure which might be considered as guide posts to the work of future committees. In addition he made a report on junior college studies in progress. At the twelfth annual meeting in Richmond in 1932, he reaffirmed the principles indicated at the Berkeley meeting and also reported studies made or in progress.

At the thirteenth annual meeting in

Kansas City, Missouri, in 1933, Dr. Smith reported studies made and in progress and asked to be relieved from further work on the committee. He had served as chairman of the Research Committee from the time it was appointed following the sixth annual meeting until he withdrew from the committee after reporting to the thirteenth annual meeting.

He and the members of his committees gave unstintingly of their time and energy. Under their able leadership valuable research studies in the junior college field were made, research efforts were approved to prevent overlappings, and reports of studies completed and studies in progress were made in the annual meetings.

You now have a new research committee. It was with a spirit of humble respect for those who have previously served on this committee and an admiration of their accomplishments that we accepted membership. We have very carefully studied the reports of past committees and we are of the opinion that the job of the Research Committee needs clearer definition. We feel that some of the former functions are now being performed by either our able secretary, Dr. Campbell, or our worthy editor, Dr. Eells. The committee feels that either the executive committee or the Association should redefine the functions of the Research Committee to eliminate duplication of effort. For the benefit of those who may be charged with the responsibility of redefining the work of the committee, we are submitting a list of functions compiled from the reports of the previous committees. We submit a list in which we have attempted to include all research activities of the Association. We recommend that those functions now being successfully performed by others should not be assigned to the Research Committee. We close the first part of our report by listing possible

functions of the Committee, and by asking that the work of the Research Committee be defined by the Association in terms of one or more of these functions, or of other functions which the Association may wish to suggest:

1. Report published research studies.
2. Report unpublished research studies.
3. List outstanding research needs in the junior college field.
4. Encourage competent investigators to undertake necessary research.
5. Conduct investigations as a committee.
6. Take initiative in and supervise co-operative research, participated in by members of the Association.
7. Encourage investigators in the junior college field to communicate with the Committee in order to avoid overlapping effort.
8. Approve individual research projects in cases where such approval may encourage junior college authorities to co-operate in worthwhile investigations.

We have taken as the second part of our report, with the approval of President Hitch, a problem suggested to us by Secretary Campbell. It also appears in the foregoing list as one of the functions of the Research Committee, namely, "List outstanding research needs in the junior college field."

An inquiry form was submitted to the chief executive of each of the 513 junior colleges listed in the 1934 Junior College Directory. These executives were asked to state junior college problems which, in their opinion, most needed to be studied. These problems have been tabulated along with a distribution of seventy-one published reports of junior college research appearing in 1933. As the inquiry form was not submitted to the executives until shortly before the annual meeting, the return was not large. The Committee is very well satisfied

with the results, however, and wishes to thank sincerely each junior college executive who co-operated on such short notice. These two distributions follow:

TABLE I
CLASSIFICATION OF JUNIOR COLLEGE RESEARCH

	1933 Studies	1934 Prob- lems
<i>Administration</i>		
Administrative head	1	0
Articulation with senior college	1	19
Buildings and grounds	1	0
Finance	2	14
Organization	1	2
Records and reports	0	11
Registration	0	2
Location of junior college	0	2
Teaching load	0	13
<i>Students</i>		
Elimination	3	4
Failures	0	10
Individual differences	2	8
Opinions and/or attitudes	5	0
Personnel problems	2	5
Recruiting	0	13
Success in junior college, in senior college, in vocations, etc...	9	1
<i>Teachers and Instruction</i>		
Class size	0	4
Curriculum	16	21
Extracurriculum	1	9
Graduation requirements	0	6
Guidance	2	17
Improvement of instruction	0	10
Teachers	2	0
Teaching methods	4	11
<i>Others</i>		
Functions of junior college	0	9
Functions of a junior college subject	2	0
High-school postgraduate students	1	0
Library and library service	0	6
Status of junior college	12	0
Tests and measurements	3	14
Publicity	2	10
Survey	1	1
Extension	0	1
	74	223

The table does not present any startling comparisons. It does seem significant to the Committee, however, that in general the studies published in 1933 cover approximately the same general fields as the problems of the junior college administrators. It is

of interest to note that the junior college administrators seem to be very well agreed as to the need of investigation in the following fields: articulation with the senior college, finance, records and reports, teaching load, failures of students, recruiting students, the curriculum, guidance, supervision and improvement of instruction, teaching methods, functions of the junior college, tests and measurements, and publicity.

Reading a list of all of the problems suggested would be too tiresome for this group already tired with a busy session. The Committee is pleased, however, to submit the following list of suggested problems which seem challenging:

SUGGESTED PROBLEMS FOR INVESTIGATION

Articulation.—Assuming the junior college is well established and accredited by a regional accrediting agency, should senior colleges and professional schools prescribe more than tool subjects of junior college transfers?

Are universities justified in setting up super-specific prerequisites and entrance requirements?

Finance.—Should the private junior college receive federal aid along with other junior colleges—municipal and state?

Records and reports.—What are the most effective methods of reporting to parents on student progress in school?

Teaching load.—What is the influence of "teacher's load" on standards of teaching?

Student failures.—What should be done as a general policy with students who fail in a large part of the first semester's work?

Recruiting students.—Has promotional activity of junior colleges and state teachers colleges become hurtful so far as our general educational program is concerned?

The curriculum.—What are the functions of survey courses? What

content and method of survey or overview courses and of terminal courses best achieve these functions?

Guidance.—What is an adequate guidance program for a large (or a small) junior college?

Supervision and improvement of instruction.—Is instructional supervision necessary in the junior college? If so, how may it be conducted most effectively?

Library and library service.—How may junior college students best be taught how to use books independently and effectively?

Teaching methods.—What are the relative merits of the lecture demonstration and laboratory method in junior college science?

Functions of the junior college.—Should the junior college compete with the senior college for students?

Tests and measurements.—Should the American Association of Junior Colleges set up its own achievement tests?

Publicity.—Should the Association develop a code of ethics to do away with unethical underbidding?

The committee received the following very valuable suggestion from President Vande Bogart of Northern Montana College:

May I offer the suggestion that practically all of the topics listed in your letter could be studied as research projects during the coming year. Ever since my earlier connection with the Research Committee, I have hoped that at some time this Committee might be able to interest junior college administrators in a program of research in which a committee would be chosen to study a certain project and would, perhaps, continue that work over a period of years, thus extending its investigations sufficiently to make a real contribution to that particular phase of junior college problems. Incidentally, I believe that this will be a means of developing still greater interest in the American Association of Junior Colleges. We are naturally enthusiastic over an organization in which we are participating actively.

The Committee is of the opinion that President Vande Bogart's suggestion is a very valuable one. The Research Committee might be thought of as a clearing committee in assisting administrators to participate in one of the studies and in compiling the results as the studies progress over a series of years.

If the Association should decide that the function of the Research Committee is to carry on either independent or co-operative research, we recommend that the Association indicate to the Committee one or more problems of sufficient importance for immediate investigation. Such problems may be on the list which we are submitting; on the other hand, they may be problems not mentioned in the report.

W. W. CARPENTER, *Chairman*
J. E. BURK
J. LEONARD HANCOCK
B. LAMAR JOHNSON

THE JUNIOR COLLEGE JOURNAL

From the financial angle it is not possible to present a complete report for the current volume of the *Journal*, Volume IV, but a statement from W. A. Friend, manager of the Stanford University Press, dated February 19, 1934, gives as close estimates as it is possible to make at this time.

Income from subscriptions has increased, but not as rapidly as had been hoped. The various expenses will be about the same as last year. Net loss for the year is estimated at \$692, a drop of almost \$100 from last year, and the smallest loss during the life of the *Journal*. This is the loss to the publishers after the \$500 subsidy from the Association has been paid. For Volume I this deficit, absorbed by the Stanford Press, was \$2,009; for Volume II, \$2,113; for Volume III, \$786.

The total circulation for Volume IV represents an increase of 12 per cent

over the total circulation for Volume III, the increase being from 633 to 714 paid subscriptions. Mr. Friend comments:

The known junior college circulation is disappointing, however, in view of the combined efforts of ourselves and the Association to boost it. The Association distributed cards last spring to its membership list asking that they make every effort to subscribe for Volume IV, taking multiple subscriptions for staff members where that was possible. A return order card, addressed to us, registered their promise to subscribe. These cards were checked in September against actual subscriptions, and reminders were sent those who had not yet confirmed this promise. Later in the fall we wrote to all who had turned in pledges to Mr. Doak S. Campbell, and many of these people have fulfilled their pledges. There was no special promotion effort made this year toward gaining subscribers outside the junior college field, since such efforts in the past had not brought results commensurate with the expense involved in making them. This group, despite neglect, came through better than before. It is hoped that subscriptions will continue to increase and so still further reduce the deficit.

From the editorial standpoint I feel that no extended report is necessary. I trust that the *Journal* very largely speaks for itself. We have continued our efforts to make the magazine more truly national in character and such as will appeal to all interested in the junior college movement. Limiting the book review department more specifically to books in the junior college and higher educational fields and conducting it on a national rather than a local basis, while involving more time and trouble, seems to have been worth while. It is planned to continue it another year.

Personally, I feel that we have been fairly successful in producing a unique journal which is of distinct interest and value to the administrative staff of the junior colleges, but perhaps that it has not appealed so much to the av-

erage faculty member. I am not sure that it is possible to make it do so, but I think something more can and should be done in that direction.

The junior college is primarily an instructional institution. It cannot and should not try to compete with the university in its emphasis upon specialization and research. It can, and it should, do a better piece of teaching than is done in the average lower division of many of our universities where the instructors are often more vitally concerned with research than with teaching. Can the *Journal*, then, print any material that will be of special value in developing better *teachers* among junior college faculties?

Last year an advanced seminar in the Improvement of College Teaching under my direction at Stanford University worked out a group of thirty or thirty-five problems in the field of college teaching. Each "problem" consisted of a brief general statement of the nature of the problem, a page of significant quotations from a number of writers who had discussed it, a page of challenging and thought-provoking questions regarding it which might be used as a basis of faculty discussions, and a brief selected bibliography. The plan was to organize the material with reference to each of these problems so that it might be used more intelligently and conveniently as a basis for discussion in faculty meetings. This material has not been published in any form. It has seemed to me that a selection of seven or eight of the most vital topics, properly edited, might profitably be made and published in the monthly issues of the *Journal* next year. I do not want to do this, however, unless it meets with the approval of a considerable group of junior college executives. If any of these at this meeting, or those who are not here but read this report, feel that it is sufficiently promising to warrant the trial I would be glad to have you write me at the United States Office of Educa-

tion, Washington, D.C. I will send you a list of the possible topics and will ask you to indicate those which, in your judgment, would be most valuable to publish. Possibly you will want to share this list with your faculty and secure their composite judgment as to the best topics to select for trial for next year.

Any other suggestions that occur to you for the improvement of the *Journal* will, as always, be more than welcome by Dr. Campbell or myself.

WALTER CROSBY EELLS, *Editor*

RESOLUTIONS COMMITTEE

WHEREAS, The annual meeting of this Association in Columbus has been greatly facilitated by the assistance of the Hon. B. O. Skinner, Director of Education for the State of Ohio; President George W. Rightmire, of the Ohio State University; and members of his faculty, particularly those of the School of Education, and by their participation in the proceedings of the annual meeting; therefore be it

Resolved, That we express our appreciation of the valuable contribution of members of the Columbus Educational Community, the Chamber of Commerce, and other citizens to the success of the fourteenth annual meeting of this Association.

WHEREAS, The values of this annual meeting are derived directly from the faithful execution of their duties by our elected officers and committees, and from those individuals who have prepared papers at the request of the program committee; therefore be it

Resolved, That we give expression to our gratitude for the high character of the contributions made to this Association by all officers and members of committees and by those who have participated so helpfully in the sessions of the annual meeting.

WHEREAS, The editing of the *Junior College Journal* has brought it to a

high level of efficiency and to the attention of an increasing number of teachers and educators by the voluntary and self-sacrificing services of its editors; therefore be it

Resolved, That the appreciation of the Association and its confidence in the editors of the *Journal* be confidently and unanimously expressed.

WHEREAS, The Board of Education of the city of Chicago by vote on July 12, 1933, closed Crane Junior College and thus shut the doors of educational opportunity to thousands of high-school graduates, be it

Resolved, That this Association urgently petition Mayor Edward Kelly and the Board of Education of the city of Chicago to make available at the earliest opportunity complete facilities for junior college education.

WHEREAS, This Association is aware of economic changes of fundamental importance in our national life, it is evident that the local and state basis of support of higher education are becoming increasingly inadequate in certain areas, and that there is an indicated need for a more definite planning of facilities for both general and professional higher education in the future on a regional and national basis, rather than on a local or state basis as at present; therefore be it

Resolved, That serious consideration be given to participation by some appropriate federal agency in the equalization among the states of the financial resources to be made available for the support of higher education, and, further, that a committee of this Association be appointed to make a study of needs in this regard and to report at the next annual meeting of the Association.

WHEREAS, The Commissioner of Education under date of February 6, 1934, has requested that presidents of institutions of higher education submit data thus implying that plans are now under consideration in the Department of Interior looking toward legislation

granting assistance to needy students, and

WHEREAS, It is also implied that consideration is being given to a continuation of the plan described under the release E-15 1122 by the Federal Emergency Relief Administration under date of February 2, and

WHEREAS, The American Association of Junior Colleges wishes to co-operate effectively with the Commissioner of Education; therefore be it

Resolved, That the Executive Committee be authorized to appoint a special committee to consider the whole matter of the need for legislation or other educational considerations in which the federal government may be interested for the present emergency, that this committee be authorized to report their findings when approved by the executive committee to the Commissioner of Education or other officials, and that the Executive Committee authorize a budget for the use of such a committee.

WHEREAS, The passing of Colonel T. A. Johnston of Kemper Military School records the close of a notably extended and distinguished educational career that, during an almost unbroken period of sixty-seven years, developed and strengthened a foremost secondary school and junior college, be it

Resolved, That this Association convey to the family of the late Colonel T. A. Johnston and to the faculty of Kemper Military School our deep sense of the loss to education occasioned by his death and express our admiration for the high devotion to foremost principles and practice governing the education of boys and young men so admirably exemplified throughout the long career of Colonel Johnston. We lament also the death of one of the pioneers of the junior college movement, President John Diel Blanton, of Ward-Belmont School, and of Dr. George P. Butler, former president of

the Junior College of Augusta and later special adviser for junior colleges.

WHEREAS, There has not been a comprehensive nation-wide study of the junior colleges for nearly ten years, and

WHEREAS, The problems of social and economic reorganization in our nation involve opportunities and obligations for the wide extension of education of our youth at the junior college level and of adults, and

WHEREAS, An evaluation of the junior college movement in all its relationships should be made, and its philosophy further interpreted; therefore be it

Resolved:

1. That the president of this Association appoint a committee to canvass the possibility of securing funds for such a study and report to the Executive Committee.

2. That the Executive Committee be empowered to proceed with plans for the study if satisfactory financial arrangements can be made.

F. C. WILCOX
EMMETT CLARK
Committee

AUDITING COMMITTEE

The Auditing Committee is pleased to report that it has examined the receipts, deposits, expenditures, and balances of the Treasurer and found them correct in every detail and in good order.

The financial report for the year is as follows:

Balance last report.....	\$ 255.53
Deposits	1,936.19
	<hr/>
	\$2,191.72
Items charged	\$1,893.17
Balance in bank.....	280.77
	<hr/>
	\$2,173.94

Tax on checks.....	\$ 1.28
Checks charged back.....	10.00
Checks outstanding from last year	6.50

Total	\$2,191.72
Collected from members....	\$1,920.00

GUY M. WINSLOW, *Chairman*
H. B. WYMAN

EXECUTIVE COMMITTEE

The meeting was called to order by President Hitch. Members present were Chairman Hitch, Hancock, Barton, Cox, Andrews, and Campbell.

1. Applications for membership were received from five junior colleges. Motion that the Canal Zone Junior College be inspected by an inspector of the Association; carried. Motion that Larson School be admitted to Associate membership; carried. Motion that in the case of Beckley College the secretary correspond directly with the University of West Virginia and the State Department of Education and follow the usual procedure; carried. Motion that Columbia College, Washington, D.C., be admitted to active membership; carried. Motion that the secretary write again a statement of the terms of membership to Colorado Vocational College; carried.

2. Motion that a resolution be prepared by the secretary and presented to the Association requesting that a committee be appointed to canvass the possibility of a nation-wide study of the junior college; carried.

3. Motion that Dr. W. C. Eells be requested to prepare a supplementary bibliography provided arrangements can be made for printing it, and that the Office of Education or some other agency be requested to print the bibliography; carried.

4. Motion that the budget be continued as of the previous year with the addition of not more than \$100 to be used by a committee on federal aid

if and when such a committee is appointed; carried.

5. Motion to adjourn; carried.

D. S. CAMPBELL,
Secretary

NOMINATING COMMITTEE

Your Committee on Nominations desires to submit the following nominations:

For president: E. Q. Brothers, Dean,
Little Rock Junior College, Little
Rock, Arkansas

For vice-president: Guy M. Winslow,
President, Lasell Junior College,
Auburndale, Massachusetts

For secretary-treasurer: Doak S. Campbell, George Peabody College, Nashville, Tennessee

For assistant secretary: J. Thomas Davis, Dean, John Tarleton College, Stephenville, Texas

For Executive Committee to serve 1934-37: A. M. Hitch, Kemper Military School, Boonville, Missouri, and A. C. Olney, Marin Union Junior College, Kentfield, California

Your committee further recommends that the 1935 meeting of the Association be held at Nashville, Tennessee, subject to final approval by the Executive Committee. Your committee further recommends that in listing the Executive Committee the period of service be advanced one year, and that W. W. Haggard of Joliet Junior College, Joliet, Illinois, serve on the Executive Committee for the year 1934-35.

ARTHUR ANDREWS, *Chairman*
J. W. BARTON
JAMES L. BECK
ROBERT J. TREVORROW
J. F. WELLEMAYER

SPECIAL NOTE: *Beginning with the October 1934 issue of the "Journal," the editorial offices will be transferred back to Stanford University, California. Until August 1, 1934, communications for the Editor should be addressed: United States Office of Education, Washington, D.C.; after August 1: 735 Dolores Street, Stanford University, California.*

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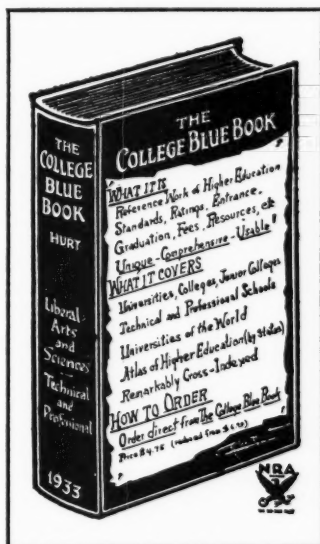
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